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Practical

Internet

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How to sort out Net hassles without calling tech support

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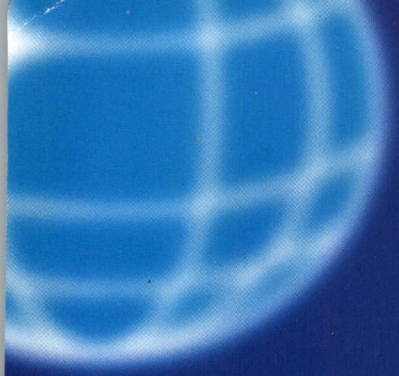

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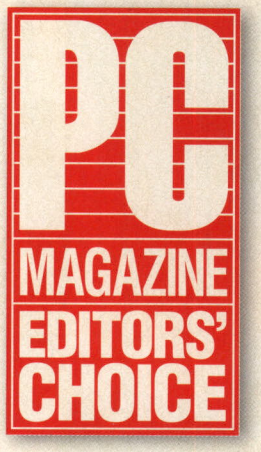
and again, and again...

Microsoft Internet Explorer 4

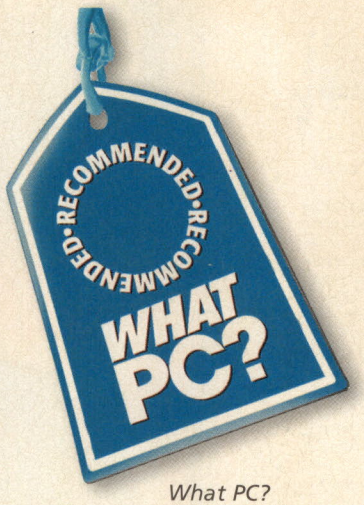
Cisco Powered Network

*Free 1 month trial only available on single access dial-up accounts for credit card holders. Limit of one free trial per household and you must be 18 years or over to apply.

Internet Magazine
December 98



PC Magazine
April 99



What PC?
May 99

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  WITH OUR 155MB TRANSATLANTIC LINK
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  TO GET ON-LINE ON CD-ROM

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  WITH EVERY DIAL-UP ACCOUNT
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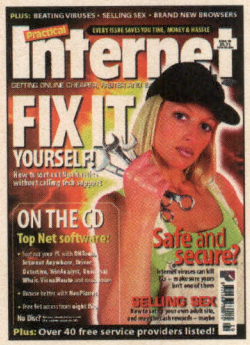

Welcome...

...to issue 29 of *Practical Internet*.

The results of last month's ISP tech support tests don't seem to have inspired many of you. Instead, I've received a depressing number of emails backing up our findings, referring to poor quality of support, with some of you left feeling that there was little point in calling in the first place.

So this month we're taking a look at how you can sort out common – and not-so-common – Net hassles for yourself. After all, not only will this save you time on the phone to your tech support team, but you could save a fair amount of cash, too. Particularly now that so many service providers charge a premium rate for support.

Also in this issue, we highlight the danger in which you put your PC simply by using the Net. From malicious scripts to online viruses to careless coding, it's scary stuff. Thankfully, you can protect yourself against these nasties, so turn to page 42 before you venture back into the online world.

But that's not all – we've got an explanation of the new PIII, a look at the music industry's views on MP3 music files, a guide to setting up your own adult Web site, full details of over 40 free ISPs, and a sneak peak at the new Quake III test levels. See you next month...

Paul Douglas, Editor
pauld@paragon.co.uk

...also on board

Steve Hill

steveh@paragon.co.uk

Steve is our trusty newshound, sniffing around in cyberspace for the freshest stories and that elusive virtual lamp-post...

Geoff Spick

geoffs@paragon.co.uk

Smoking joystick in hand, Geoff is always at the ready to kick our collective butts at Quake, SiN, Unreal, Shogo, tiddlywinks...

Chris Ellison

chris@netfreedom.org

Founder member of the Campaign for Internet Freedom, Chris writes our regular NetWatch column – keeping an eye on the Net

Clive Parker

helpdesk@paragon.co.uk

Technical wizard Clive staffs our Net Surgery. If you've got any online problems, he's the man to help

James Seabright

james@paragon.co.uk

Web design pro James runs our Home Improvement section, helping you get the most out of your home page

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...instead of calling tech support 34

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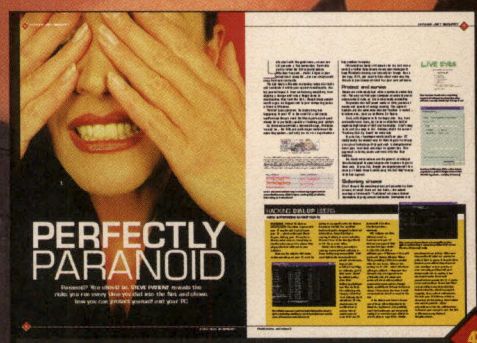
SITESEER

Looking for sites to entertain the little folk in the household? This issue we bring you a fantastic selection of kids' sites



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PERFECTLY PARANOID

Before you start downloading stuff from the Net, take precautions – even the most harmless looking Web page can trash your hard drive

What's in store this issue...

INFONATION

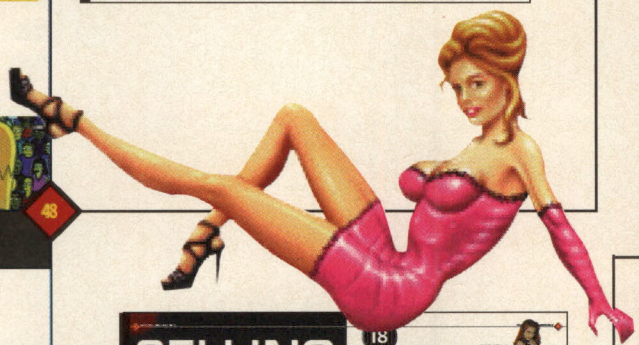
The latest happenings in the world of the Net, plus NetWatch, Worst of the Web, Legal Aid and more...

FIX IT YOURSELF!

Don't spend time and money on the phone to your ISP's tech support team. Find out how to banish Net nightmares for yourself

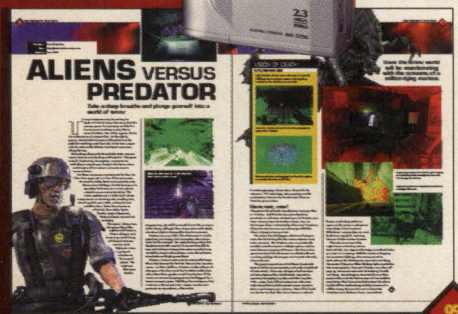
PIII OR NOT PIII?

You've heard the hype, now get the facts. Find out just what the new Pentium III processor can do for the Net user



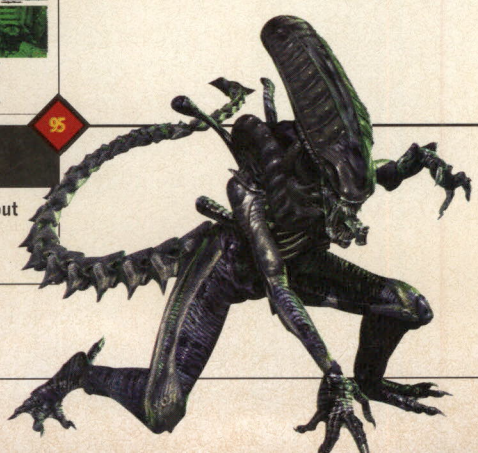
SELLING SEX

Sex sells, or so they say. So why aren't you cashing in on the demand for adult sites? We talk to the people behind the pictures



NETGAMER

The wait for Quake III is almost over! Find out how the NetGamer team rate the first ever Quake III test levels to hit the Net



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130 **FAQs** — MACROMEDIA'S MD

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Price excludes naming authority fees

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- Full graphical site statistics

Price excludes naming authority fees

Magic from the Heart £195pa

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- Remote control panel via web interface
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Filemaker Pro database hosting	from £200 pa
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Frontpage extensions (web hosting packages only)	£50 pa
Shopping cart systems	from £200 pa
Server Co location (from 64Kbps)*	from £3600 pa

*Set up charges apply

Naming Authority Fees

UK domains (.co.uk, .org.uk)	£20
Global domains (.com, .org, .net)	£45
Austria domains (.at)	£100
Bahamas domain (.bs)	£80
Belgium domain (.be)	£100
France domain (.fr)	£360
Germany domain (.de)	£165
Holland domain (.nl)	£45
Ireland domain (.ie)	£95
Libya domain (.ly)	£80
Switzerland domain (.ch)	£80

Based on two years fees. Fees are subject to change without notice due to fluctuations in exchange rates.

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<<< SHOP ASSISTANT

SHOPGUIDE (http://www.shopguide.co.uk) has brought comparison shopping to the UK with the introduction of the BargainFinder service. The service aims to make it easy for shoppers to compare prices for CDs, books, videos and games with a search engine that provides a list of UK stockists along with prices and delivery times. Names such as Amazon, WHSmith and Entertainment Express have already signed up to the service. Every site listed in the directory has been visited by a member of ShopGuide's team and tested against a range of criteria including usability, range and service.

INFONATION

The complete **insight** into all things **Internet...**

Free calls become reality

Screaming.net and Cable and Wireless ease Internet costs

THE idea of being able to use the Net without running up a massive phone bill has long been the dream of Net users. Now it is a reality, with the launch of new services from Screaming.net and Cable & Wireless.

Screaming.net, promoted by Tempo, the electrical retailer, is designed to compete directly with Freeserve. It provides subscription-free Net access and free local calls during the evenings and weekends.

"We think this is a real first," said Tempo Deputy Chairman Michael Kraftman, speaking at the launch of the service. "It has got the potential to affect the psychology of Internet use in the United Kingdom. People will have a far more relaxed attitude and be able to spend more time online. We genuinely expect this will expand Internet use."

Free CD-ROMs with all the software to go online can be picked up from the 48 Tempo stores in the UK. Alternatively, you can see Screaming.net at **http://www.screaming.net** for more information.

Cable's able

Not to be outdone, Cable & Wireless has launched a flat-fee Internet service to complement Internet Lite, its free ISP service. Called Connect, it will combine Internet access and telephone charges which will help Internet users avoid huge phone bills.

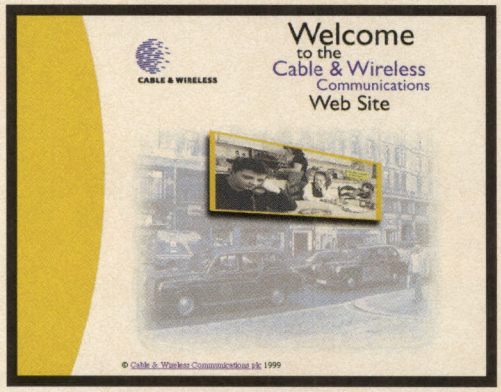
There's a number of pricing plans available which range from £5.99 a month for 12 hours of free Internet call time, up to £29.99 for 75 hours. Each subscription also offers five email addresses and 20Mb of Web space.

"These new services are designed to help customers save on the major expense of frequent or heavy Internet use – call charges." said Janet Somerville, Consumer Marketing Director at the company. "Cable & Wireless' new, integrated packages offer a quality, feature-packed service with a call time plan to help subscribers manage the expense of Internet use."

Finally, AOL UK has launched a free-calls trial for some users who subscribe to the service. Plans have been disclosed that AOL is trialling a freephone 0800 telephone number for dial-up access, meaning that people who pay a monthly subscription fee could stay online for as long as they want for their monthly subscription fee.

The AOL news broke after some of the trial sign-up packs were sent out by mistake. So far, all the online service provider will admit to is: "A number of pricing structures," and remains tight-lipped about future freephone plans.

In recent months Andreas Schmidt, CEO of AOL Europe, has called for an end to clock-based call charging which he claims is hindering Internet growth.



Cable and Wireless offers flat-fee access

WEBCAM OF THE MONTH

THE TAXICAM

http://www.ultimatetaxi.com/taxinow.htm

SEE who's in the 'World Famous Ultimate Taxi' which has been been modified with rather odd kit. Inside are four red lasers, two mini-strobes, a mirror ball, fog machine, a 900 Watt Alpine sound system, and a camera, mobile phone, wireless LAN and laptop.

Screaming

SOME people who tried the Screaming.net service in the first few weeks of its launch seem disappointed with the service received.

Many find that when their modem tries to dial in to the computers, it returns an engaged tone. One angry Screaming.net customer posting to the **alt.internet.providers.uk** newsgroup saying: "Dialling in to the sign-up server was a pain. I kept on hearing an engaged tone. I finally got through on about the 10th attempt and successfully completed the registration process."

Another message was posted by someone who claimed to have tried 20 times to register at 2am on a Monday morning – hardly the time when people are scrambling to join an ISP.

To enjoy the free off-peak local calls (and discounted

NEWSBYTE

To promote Cheesy Wotsits, Golden Wonder has launched a site themed around the Willie character developed for the press and TV advertising campaigns. The site, at http://www.wotsits.co.uk, contains loads of cheese-tastic goodies.

<<< SMOOTHER STREAMING

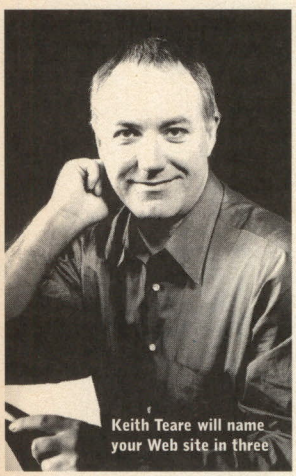
APPLE has released the public beta of its multimedia software QuickTime 4 for Macintosh and Windows. Apple says the new streaming capabilities allow people to use a variety of compressors and decompressors, enabling high-quality performance even over 28k modems. The QuickTime player now features a new look and feel, with one-click access to online content, as well as audio controls for balance, volume, bass and treble. Download a free version from http://www.apple.com/quicktime. The advanced version costs $29.99.

FREE WEB SPACE USERS GET REAL

ENGLISH Netrepreneur Keith Teare has been talking about his latest project to make navigating the Web easier. Known as RealNames, it gives anyone their own username which is easier to remember than a URL.

Teare is best known as being the co-founder of Cyberia in 1994, the UK's first Internet café which still exists in London's Whitfield Street. It has now developed into a global brand.

Later in 1994, he went on to launch Easynet, the popular ISP, which has recently floated. The company's offices are located directly opposite Cyberia for maximum convenience.



Keith Teare will name your Web site in three

Teares's Web site at Fortune City

In 1997, he left the UK to form California-based Centraal to provide URL-naming solutions. "RealNames was created to offer companies memorable names for Web site URLs. It's designed to make navigating the Net easier for everyone," Teare told us.

Originally, RealNames could only be bought by businesses. "Companies pay us $5 every time someone accesses their site using their RealName."

The good news is that since April, everyone, even people who don't run multi-billion corporations, can get recognised on the Net. My RealName allows individuals with pages hosted at free Web site hosters, including Fortune City and Tripod UK, their own RealName.

Teare explained: "I have a site at Fortune City. My RealName is "Keith Teare." So if you type that name into any RealName enabled environment, such as AltaVista or in the location box of IE 5.0, you will be taken to my page."

A user's RealName can be just about anything, and doesn't have to be a person's actual name, but there are some rules. "We are not going to allow anyone to be the Coca Cola Kid," said Teare. "A My RealName address must be unique and can't include commercial brand names or names of celebrities." So if you want to be "Kylie Minogue" – tough! Unless of course your name just happens to be that of that fine purveyor of pop.

The CDnow Album Chart

WHAT'S TOP AND WHAT'S NOT

1. **Ego Has Landed** – ROBBIE WILLIAMS
2. **Phantom Menace** – STAR WARS (VARIOUS ARTISTS)
3. **Dawson's Creek** – TV SOUNDTRACK (VARIOUS ARTISTS)
4. **Mule Variations** – TOM WAITS
5. **Something For Everybody** – BAZ LUHRMANN
6. **Hush** – TEXAS
7. **You've Come A Long Way Baby** – FAT BOY SLIM
8. **Echo** – TOM PETTY & THE HEARTBREAKERS
9. **Americana** – OFFSPRING
10. **Bury The Hatchet** – THE CRANBERRIES

CDNOW the INTERNET'S NUMBER ONE MUSIC STORE

Based on sales to UK customers from the Web site of CDnow (http://www.cdnow.com) during April 1999

NEWSBYTE

The New Woman Web site (http://www.newwomanonline.co.uk) has been relaunched with improved navigation and additional material including an interactive 'Todger Test,' Bloke Jokes, 10 chat channels, a Privilege Club, and content from the magazine.

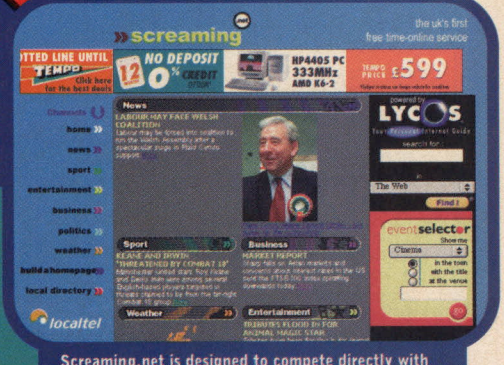
for access

calls at other times) customers need to have their normal telephone line transferred to LocalTel. The bad news is that this takes up to eight days for BT (or other telephone providers) to sort out. During the first week there was a bank holiday weekend which meant that the process actually took longer.

Screaming.net does provide a free technical helpline number to for users experiencing installation problems. Yet many new subscribers claim that the number is engaged for hours at a time.

A spokesman for Screaming.net responded: "We have had a massive number of people trying to log on to the service at once. There have been times when people have had difficulty getting through. We are addressing these problems and are adding new capacity to ensure that the problems are temporary and just a result of a massive initial demand. We have subscribed 15,000 people within the first week, and are certainly expecting that to tail off, and we will be able to handle enquires a bit more successfully. Nobody should think that this is a scam to make people join Localtel. We can offer this because we are a telco. We are monitoring what BT is up to and making sure that they are switching customers over to us within the eight days that they quote. Some people allege that BT is being deliberately obstructive with third-party resellers – I wouldn't say that, though."

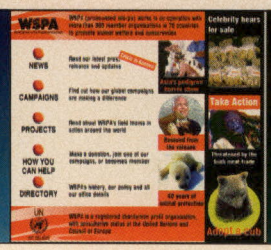
To get free calls with Screaming.net you also have to sign up to LocalTel



Screaming.net is designed to compete directly with the phenomenally successful Dixons Freeserve

ANIMAL AID >>>

THE World Society for the Protection of Animals has launched its site at http://www.wspa.org.uk. The regularly updated site has been designed to provide user-friendly pages that are clearly and logically linked together. Features on the WSPA Web site include news and pictures of current projects and activities, a background of the WSPA, details of becoming a member, making donations, and adopting animals online, and a virtual press office and media email list. If you're after the information rather than the pictures, you'll be pleased to know that there's a text alternative to the graphical site.



Legal Aid

KEN CHIA AND MICHAEL MAHONY OF IT SPECIALIST LAW FIRM, HAMMOND SUDDARDS, ARE HERE TO ANSWER YOUR LEGAL QUERIES. SEND YOUR QUESTIONS TO **PI@PARAGON.CO.UK**

Q **I run a Web site (http://www.speed-way.com) which includes a 'discussion' style email list on the sport of motorcycle speedway. It's totally free. Anyone can subscribe. As you can probably imagine, the contents of some messages are less than complimentary towards individuals and others. It's been suggested to me that I could have some kind of legal accountability for what people put on the list and if people post messages which could contain material that could be interpreted as slander/libel then the offended party could come after me. I'd have thought that if offence was taken then it would be a matter between the offended party and that author of the offending message. Am I on the wrong track here or could I also be held partly accountable is some way? I have no control over what people say in their messages.**

A The recent trend of cases in Europe seems to suggest that you may be held legally accountable for 'illegal' material posted on your Web site if you have 'knowledge' of the nature of the material.

In the UK, liability for defamation at common law extends to editors and publishers as well as the original author. There is a limited defence which is contained in s1 of the Defamation Act 1996. This provides that:

s1(1) In defamation proceedings a person has a defence if he shows that:

(a) he was not the author, editor or publisher of the statement complained of,

(b) he took reasonable care in relation to its publication, and

(c) he did not know, and had no reason to believe, that what he did caused or contributed to the publication of a defamatory statement.

The limits of this defence was shown recently in the UK, when the High Court held last month in Godfrey v Demon Internet that Demon could not rely on that defence in relation to defamatory material published on the soc.culture.thai newsgroup because it failed to remove the offending material once it had been notified by Godfrey.

You state that you have no control over what people say in their messages. I presume that you can, however, remove a message from the Web site, either before or after it is published – you may have 'editorial control' over which emails are published on your Web page, for example. If you vet them before they are put on the Web site, then you may be liable under common law as the defence under s1(1)(a) is limited to persons who are only involved:

s1(3) (a) in printing, producing, distributing or selling printed material containing the statement;

(c) in processing, making copies of, distributing or selling any electronic medium in or on which the statement is recorded, or in operating or providing any equipment, system or service by means of which the statement is retrieved, copied, distributed or made available in electronic form;

(e) as the operator of or provider of access to a communications system by means of which the statement is transmitted, or made available, by a person over whom he has no effective control.

If you do not fall within the definition in s1(3) then you will need to prove that you are an 'innocent disseminator' under common law. Demon was held to not to be an author, editor or publisher under s1(1)(a) but still failed under (b) and (c).

This decision is being appealed at the moment but in the meantime the safe route to take is:

- Include a disclaimer on your Web site along the lines that you take no responsibility for any statements made by third parties and do not necessarily share their views.
- If you do vet the emails before they are published, do not post any messages which are clearly defamatory.
- Once you receive any notice that messages are defamatory, you should remove them promptly from the Web site.

Get the parties together to try to settle the matter. As a compromise they may be happy to have the original message and a rebuttal published side by side.

Two French cases decided in February and May also imposed liabilities on ISPs for illegal material posted on Web sites hosted by them. In the first case, the Paris Court of Appeal held that an ISP should have censored 19 nude and semi-nude photographs of supermodel Estelle Hallyday which were posted anonymously to a web page without her consent and awarded FF 330,000 in damages and court costs in respect of her violations of privacy. In the second case an ISP was held liable for their customer putting photos of Jean Paul Gaultier and Christian Dior's models or collections or protected brand names online without the permission of the fashion houses.

There are currently two EU Directives being proposed on e-commerce and the harmonisation of copyrights which may affect the liability of ISPs but it does not look like ISPs will be provided with the same immunity which is granted to ISPs in the US under the Communications Decency Act (47 USC Section 230).

[Note: it is not only ISPs and BBS providers who should be wary of defamatory material posted to them or held on their Web sites – if you receive a defamatory email and forward it on to others, you would be liable as a re-publisher of the statement, and possibly so would your employer if they could be held to be vicariously liable.]

SKY HIGH

BSKYB, the satellite broadcaster, has announced that it is to launch a free ISP service on 1 June. Known as SkyNow, it will form part of the company's digital television package.

For a one-off installation payment of £40, users will get a free digital satellite dish and receiver worth around £200, together with subscription-free Net access and 40 per cent off standard BT telephone calls.

"Our new consumer proposition will transform the company and the entire industry," says Mark Booth, chief executive of BskyB. "It gives customers free access to digital television, a free ISP and massively discounted telephony. It removes all the barriers to entry for customers."

BskyB will be hoping that the move will secure its position as the leading digital TV provider in the UK, ahead of rival ONdigital. We may also see the broadcaster establish itself as one of the UK's leading ISPs.

More than half a million people currently subscribe to Sky Digital – keeping it on target to hit its goal of one million customers by October of this year.

Fly by Bob

FORMER pop star, television executive and Live Aid organiser Sir Bob Geldof has launched his own online travel agency. Known as Deckchair.com (**http://www.deckchair.com**), it offers bargain flight tickets over the Internet.

Geldof said the idea for the site had been born out of frustration at being unable to find cheap airline tickets when he had wanted to take his children on holiday to Florida last summer.

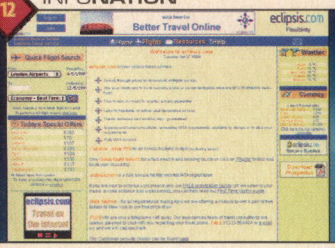
"I get really irritated and impatient and irascible when I can't do simple little things like get a cheap flight," he said.

That frustration spurred him on to team up with James Page, one of the founders of Eidos, the computer games group, which helped develop the software used on the site.

Geldof says Deckchair.com will be free of jargon and quick and easy to use.

Sir Bob relaxes on a sunny beach in North London

All Internet access calls are charged at local call rates. Calls to our 0900 numbers are charged at 50p/min (the average time to open an account is less than 4 mins).



<<< FLY AWAY

ECLIPSIS.COM is a new online travel service that aims to change the way flights and holidays are booked by empowering the traveller with the same tools as their travel agent. The service allows users to do as many 'what if' queries as they like to ensure that they are purchasing the right flight for themselves, and the various options can be browsed through. But if you need assistance or want to book the flight over the phone, there's a team of operators at the eclipsis.com call centre. Initially, the site will only allow flights to be accessed, but we're told that it will soon offer hotel and car reservations, as well. For more information, go to http://www.eclipsis.com.

Virgin gets heavy with spammer

VIRGIN Net is to undertake the first known legal case in the UK to sue for damages for breach of contract and trespass, after a Surrey businessman persistently sent out more than a quarter of a million junk emails using a Virgin Net account.

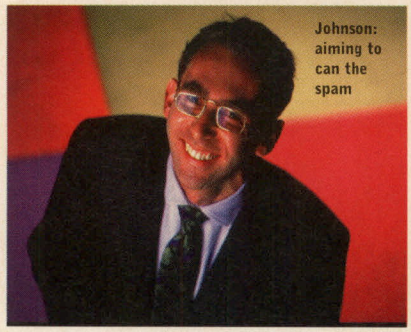
Adrian Paris, trading under the company name ProPhoto UK sent out a series of spam to a large number of people, prompting thousands of complaints and causing disruption to Virgin Net's computer system.

Mr Paris first set up a Virgin Net account in July 1998 to send spam in an attempt to sell a database of email addresses from one to 10 million at a purchase price of £15 – £105.

Virgin Net immediately notified Mr Paris he was breaching its terms and conditions to which Mr Paris replied, apologising for the emails and claiming the advertising email was sent by mistake.

In September, a second account in another name was set up by Mr Paris, which he again used to send spam, prompting further complaints and causing inconvenience to Virgin Net and recipients of the emails. This account was cancelled immediately by Virgin Net.

Later that year Mr Paris set up two more accounts using two different names to send out further unwanted emails, generating a total of over 1,500 complaints altogether and leading to Virgin Net's mail service being 'blackholed' by RBL, a mailing list set up to enable other ISPs to reject mail from mail providers which permit bulk emailing. Virgin Net Business Development Director David Johnson hopes the case will send out a clear message to spammers to desist. "Spamming is a nuisance to our customers and a reputation issue for us," he said. "As an ISP we have a responsibility to protect our customers from potential spamming and by pursuing this case we hope that spammers will think twice before sending any unsolicited email out in the future."



Johnson: aiming to can the spam

The Black Star Video Chart

THE ONES TO WATCH

1. **Lock, Stock And Two Smoking Barrels**
   STARRING: VINNIE JONES AND DEXTER FLETCHER
2. **Star Trek Voyager – Vol. 5.2 – Extreme Risk/In The Flesh**
   STARRING: KATE MULGREW AND JERI LYNN RYAN
3. **Star Trek: Deep Space Nine – Vol. 7.2 – After Image/Taking Me Out To The Holosuite**
   STARRING: AVERY BROOKS AND MICHAEL DORN
4. **Big Lebowski, The**
   STARRING: JEFF BRIDGES AND JOHN GOODMAN
5. **Jeeves And Wooster – The Complete Second Series (Two Cassettes)**
   STARRING: STEPHEN FRY AND HUGH LAURIE
6. **Star Trek Voyager – Vol. 5.3 – Once Upon A Time/Timeless**
   STARRING: KATE MULGREW AND ROBERT BELTRAN
7. **Lion King II, The: Simba's Pride (Animated)**
   STARRING: MATTHEW BRODERICK (VOICE) AND MOIRA KELLY (VOICE)
8. **Star Trek: Deep Space Nine – Vol. 7.3 – Chrysalis/Treachery, Faith And The Great River**
   STARRING: AVERY BROOKS AND RENE AUBERJONOIS
9. **South Park – Series 2 – Vols 1-3 (Collector's Box Set) (Animated)**
   STARRING: KYLE, STAN, CARTMAN AND KENNY
10. **Night On Earth (Part Subtitled)**
    STARRING: WINONA RYDER AND GENA ROWLANDS

BLACK STAR
the UK's biggest video store

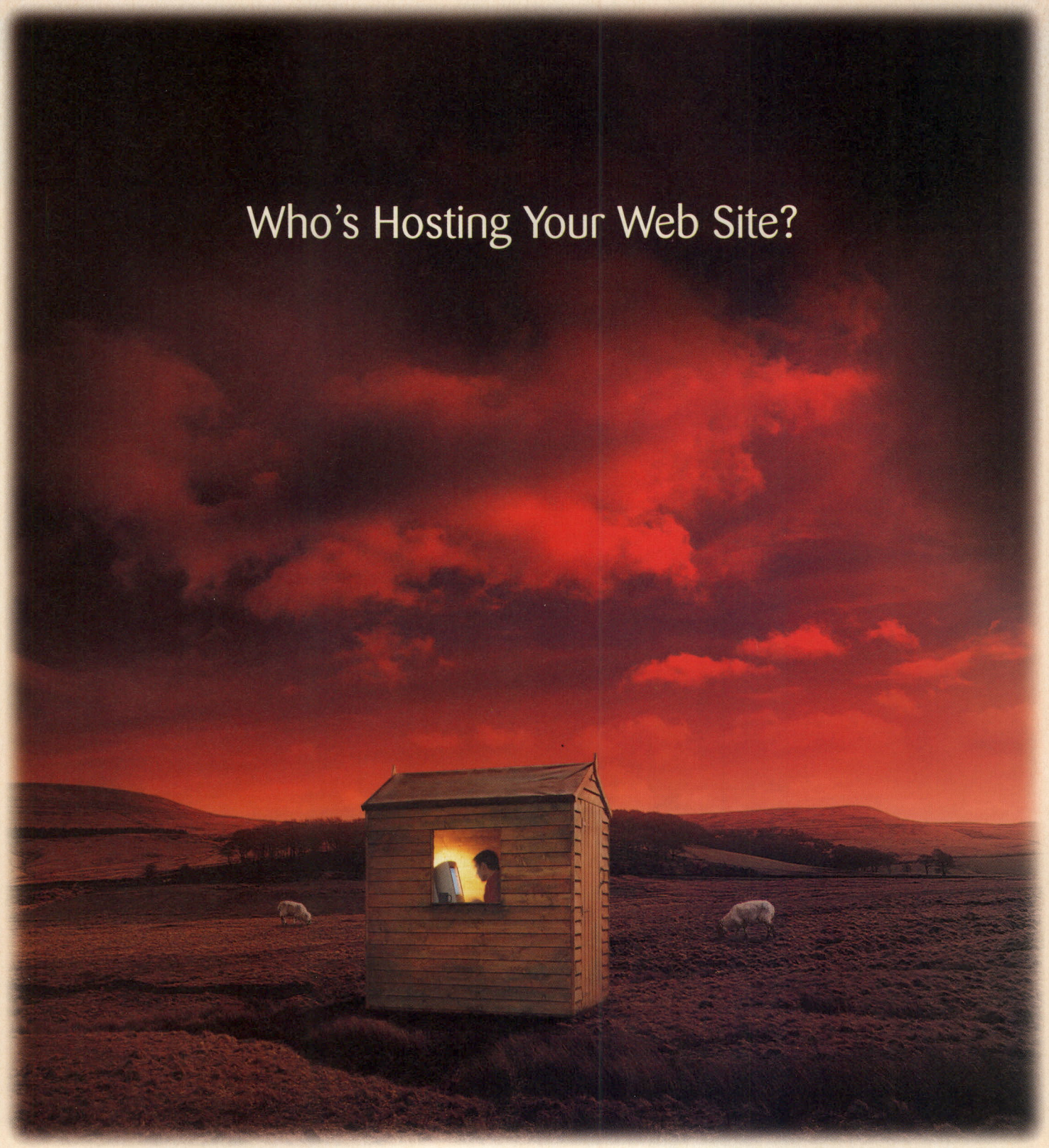
Based on orders taken at the Black Star Web site (http://www.blackstar.co.uk)

WHSmith goes free

WHSMITH has hopped aboard the free Net access train with WHSmith Online (**http://www.whsmith.co.uk**). Customers can collect a CD from any branch of WHSmith for 50p, with proceeds used to fund WHSmith's community work in the field of literacy. Key features of WHSmith Online include:

- Ten places to visit: Education, Home & Family, Entertainment, News, Travel, Sport & Leisure, Health & Lifestyle, Internet & PCs, Money & Business and Local Life.
- Free access to *The Hutchinson Family Encyclopaedia*, including National Curriculum guides with links to educational Web sites.
- Free Net access powered by BT Click.
- Free Web-based email from Hotmail.
- Ten retail sites including five WHSmith shopping sites.
- A year's free use of Net filtering software CyberPatrol.
- News and articles from magazines such as Vogue, Woman's Own, Ideal Home, Good Food and NME.

"A key part of our future strategy is to build on the strength of the WHSmith brand. The launch of WHSmith Online is an exciting development in that strategy, making our Internet service available to the millions of customers who visit our stores each week and to regular Web users. It has a strong focus on education but is also fun for all the family and is very easy to use," commented Richard Handover, Group Chief Executive.



You'd be surprised. Not every web host provider is as professional as you might think.

Benefit from Total Web's substantial experience in hosting UNIX and NT based web sites and enjoy peace of mind.

Here's the Total Web difference

- 20MB Unix or NT accounts from £188 (plus VAT) including unlimited e-mail addresses, access statistics and Active Server Pages or a Perl/CGI application environment.
- Multiple Mapping, allowing more than one web site to be hosted in a single account, saving you time and money.
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FREEPHONE SALES: 0800 435715 WEB SITE: http://www.totalweb.co.uk E-MAIL: sales@totalweb.co.uk FAX: 0161 485 2226

<<< BOOKS GALORE

ONLINE bookseller Amazon.co.uk (http://www.amazon.co.uk) has announced an expansion of its marketing programme with the free online service provider LineOne (http://www.lineone.net). Under a two-year agreement, visitors to LineOne will be able to link to Amazon.co.uk and receive a £5 book voucher to spend when they sign up with the service. LineOne users will also be able to receive information about their favourite books through email "This marketing partnership with LineOne will deliver a unique combination of news, information and shopping to thousands of people online," said Dr Simon Murdoch, MD of Amazon.co.uk.

Gail's force

VIRGIN Radio DJ Gail Porter, who was covering for Harriet Scott on the Drive Time show, crashed the Virgin Radio video server when she announced to listeners that they could watch her live as well as hear her on the show.

Gail said on air: "Here at Virgin Radio, we're a truly interactive lot. Not only can you email me at **studio@virginradio.com** – as well as phoning and faxing – but you can also watch me in action live on air via the Internet. We've got a camera in the studio wired up to our Web site, so if you're online pop along to **http://www.virginradio.com** and follow the links!"

In just 48 seconds the site was accessed by tens of thousands of eager listeners, eager to get a glimpse of the Scottish presenter on air.

Managing Editor of Ginger Online, Mike Hales, said: "We were delighted by the response, but thankfully the server was fixed within two minutes. Gail has been really helpful throughout, and has been up for anything that we wanted to try."

She may look innocent, but this woman single-handedly crashed the Virgin server

MP3 GENERATION

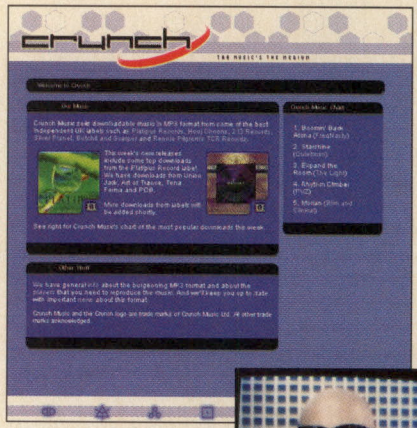
Remixes galore on the Crunch site

MAY saw the launch of the world's first MP3 remix competition, hosted on Crunch (**http://www.crunch.co.uk**), a UK download music resource site. The idea behind the competition was to allow music enthusiasts the chance to submit their own remixes of Rennie Pilgrem's new single 'Soundboy Kingpin.' The winning entry will be released through TCR Recordings, win £50 of Crunch downloads, plus Diamond Multimedia's Rio Player and Monster Sound MX300 soundcard, all worth in-excess of £300.

The competition started on 24 May and will run for one month, closing on 30 June. The separate audio parts of 'Soundboy Kingpin' are hosted in MP3. This decision allows users to download these parts and then remix them at home. Crunch is inviting users to email in their remixes, which will then be judged by Rennie Pilgrem and the Crunch A & R team. Users can also download for free, for a limited time, an unreleased mix of 'Soundboy Kingpin' that Rennie Pilgrem has recorded specially for Crunch.

The top five remix entries will be hosted on the Crunch site with the winning entry receiving a full release through TCR Records later this year. As well as getting a release on a record label, the winner will also receive £50 of Crunch downloads plus Diamond Multimedia's 32Mb Rio Player with two 16Mb flash upgrades, case and remote, plus a Monster Sound MX300 Soundcard. Two runners-up prizes of 32Mb Rio Players will be also be awarded.

Jon Davis, General Manager of Crunch, said "This is another great example of using MP3 format to market and sell music. We're very excited about the response we're going to get from our users and can't wait to hear the remixes that come in. This is a campaign we'll run with other artists on Crunch in the future. The response to the site, so far has been fantastic and this type of promotion is perfect for the MP3 community and Crunch's users."

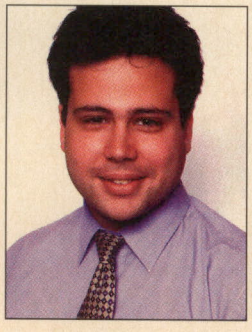


Rennie Pilgrem (right) wants you to diddle with his Soundboy Kingpin

"With the millions of people using MP3 right now it just can't be ignored. This promotion will get my music heard by a whole new market that I've previously not tapped into," added Rennie Pilgrem, head honcho of TCR Records.

Clara's call

CLARANET has now extended its ClaraCall Internet access package nationwide. The scheme, which charges a monthly subscription rate in exchange for cheaper phone calls, offers savings up to 50 per cent on BT's local call rate.



Nasser: "giving Net users more choice and better service"

ClaraCall is available as a monthly unlimited access account priced at £8.99 per month, or an annual unlimited access account for £99. The annual option also includes £30 worth of free calls credited to your account.

In order to qualify for a ClaraCall account, you must dial in from a BT line. ClaraCall then offers the following phone rates: peak rate costs 2.8p per minute, cheap rate 0.9p, and weekend rate 0.5p per minute. Access time is paid for in advance and as the customer spends time online with ClaraNET, their ClaraCall account will be debited accordingly. If you typically spend 4.3 hours a week online, says ClaraNET, the savings on call charges that ClaraCall will give you will be in excess of £13 per month.

Other features of the account include free connection software, 50Mb of Web space, 24-hour technical support charged at local rates, unlimited email addresses and access to over 30,000 newsgroups.

"With the extension of ClaraCall to national coverage, we are building on our recent success through pioneering "cheaper than free" Internet access by making ClaraCall better value for the majority of Internet users. With national coverage and lower call rates, we expect to accelerate our growth and lead the industry in giving Internet users more choice and better service," said the ClaraNET MD, Charles Nasser.

For more information, see **http://www.clara.net** or call **0845 355 1000**.

NEWSBYTE

Married-Life is a new online cartoon strip which can be found at http://www.married-life.com. This up-to-date and topical cartoon takes a humorous look at the life of couples Shazz and Simon and their friends Arthur and Trace.

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but you **do** get what you pay for

For the New User:

- Free Technical Support available everyday via lo-call 0845
- Free Pre-configured software
- Fast Web Access
- Fast V90 K56flex Modem or ISDN access up to 128kbs

For the More Experienced User:

- 25Mb of Free Homepage Space. Use your own CGI for Home or commercial*
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*Terms and conditions apply

PI/FI

<<< FREE DVD

DVDPLUS, a UK supplier of DVD films and games, has launched a customer loyalty scheme. Customers buying a DVD from the site at http://www.dvdplus.co.uk will receive a 'loyalty +point.' When 12 points have been collected, customers can order any film or game free of charge, regardless of the price. The whole process is automated with an on-screen icon appearing when 12 points have been collected. Orders can be placed 24-hours a day, seven days a week and there's free delivery.

net WATCH

INTERNET FREEDOM'S CHRIS ELLISON CASTS A WATCHFUL EYE ON THE LATEST DEVELOPMENTS IN CYBERSPACE

JOURNALISTS have a difficult job. Nosing out news, meeting tight deadlines, ensuring accuracy and writing copy that sparkles.

When two schoolchildren Eric Harris and Dylan Klebold armed themselves with weapons and attacked their fellow pupils at Columbine High School in Littleton, USA, fourteen school children and one teacher were left dead. The media swooped and the Internet became a prime suspect.

The Guardian ('A clique within a clique, obsessed with guns, death and Hitler,' 22 April) claimed that Eric Harris's Web site offered 'a chilling insight into the beliefs of the more extreme members of the Trenchcoat Mafia.' It went on: 'Elsewhere there are descriptions of how to make pipe bombs, which he (Harris) praised as "some of the easiest and deadliest ways to kill a group of people."' *The Guardian* let Harris explain: 'Shrapnel, he said was very important if you want to kill people in large numbers.'

The Daily Telegraph ('Evil culture of Trenchcoat Mafia,' 22 April) reported that Internet gamer Harris 'had posted a profile of himself on the Internet saying that Sony's Doom game was one of his favourites.'

The tragic events in Littleton became international news, and journalists across the globe searched frantically for a new angle. Several journalists claimed to have found a connection between the atrocious murders and the Internet.

But the suggestion that the Net causes murder is absurd. Between 1993 and 1996, Internet use increased amongst young people like Eric Harris. Yet FBI statistics in the same period recorded that the number of juveniles (persons aged 10-17) arrested for murder in the US fell from 3,473 to 2,188. So how can the Net contribute to murder? It's not simply that journalists are lazy: the notion that the Internet is dangerous has now attained the status of common sense. It's a fashionable and snappy angle. Fortunately it has no grounding in evidence.

(Homicide statistics available at: **http://www.census.gov/prod/3/98pubs/98statab/sasec5.pdf**).

internet freedom
www.netfreedom.org

Internet Freedom can be contacted on campaign@net freedom.org. The campaign's Web site is at http://www. netfreedom.org.

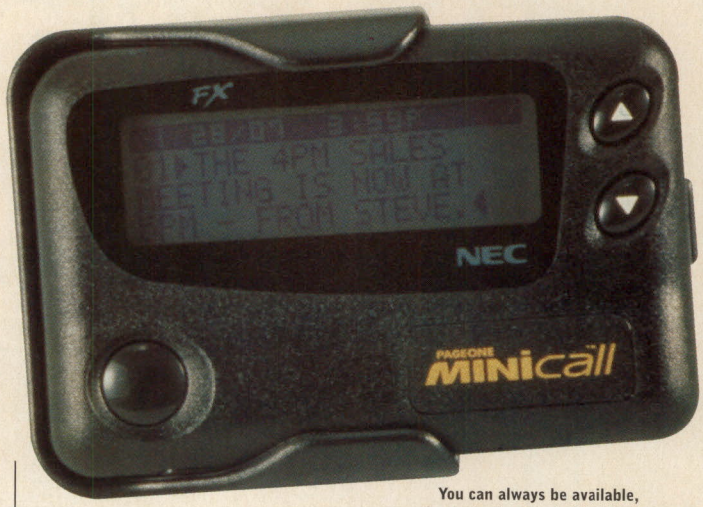
MAIL ON THE MOVE

BEING away from your PC or switching it off is no longer an excuse for missing important emails. PageOne's new Mini-Mail e.four forwards 240 characters of selected emails, including the subject, sender name and start of message, to a four-line pager.

The e.four package retails at £99.99 and includes email notification for three months, a free Web-based email account, free Internet access and free software to send pager messages direct from a PC. The unit complements PageOne's existing e.one Mini-Mail package which forwards the sender name and subject header (up to 100 characters) to a one line pager. It costs £59.99 and includes email notification for three months, an email account, Internet access and direct paging software.

Following purchase of Mini-Mail, customers call **01523 511 111** to register the account and activate the email notification service. They then visit **http://www.mini-mail.com** to set up their Mini-Mail email account. Emails can be sent and received from any PC with Internet access, and if you don't already have Internet access or want free access, software is also provided.

Mini-Mail can also check the majority of other email accounts (for example at work or college) and notify the pager of specific emails waiting in those mailboxes. Following the three month email notification service included with e.four and e.one, the service is renewed at £49.99 per year, or £15 per quarter, and allows users to receive up to 100 notifications per month. For further information call PageOne on **01523 511 111** or visit the Web site at **http://www.pageone.co.uk.**



You can always be available, thanks to PageOne's Mini-Mail

AOL DROPS PRICES

AOL has finally caved in to the pressures exerted by the free ISPs and adjusted its prices – but it hasn't gone free. Instead, the Internet provider that lost its number one slot to Dixons' Freeserve has dropped its unlimited use rate from £16.95 per month to £9.99. The new plan, AOL claims, will offer unmatched value to AOL UK's 600,000+ users, drive membership growth and use of the service, and accelerate the development of a multiple-revenue stream business.

But Peter Venmore, Director of Global Internet Limited, was unimpressed. "This is a strange move from AOL. Reducing its price to £9.99 just brings it in line with all the current ISPs who charge. Most of these, including Global Internet, are targeting the professional single user and SOHO market.

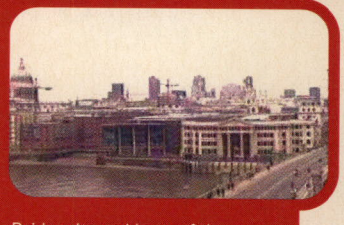
"AOL is still targeting the consumer market, which is the prime market for the subscription-free ISPs. It may stem a small percentage of people leaving AOL, but I doubt it will make a big difference. I would think Freeserve is laughing about it!"

London calling

FT.COM, the news and business information Web site from the *Financial Times*, is offering a live view of the London skyline and construction of the Millennium Bridge to Net users around the globe. The user-controlled Canon WebView cameras are hosted by FT.com on its new Millennium Bridge Web site at **http://www.mbridge.ft.com**.

Through the site you can manipulate the zoom, pan and tilt of WebView cameras located on the roof of the Financial Times building and across the River Thames at the City of London school. The cameras offer live views of both north and south banks of the river, London's first new pedestrian bridge for over a century, and London landmarks including St. Paul's Cathedral, the new Tate Gallery of Modern Art and the Globe Theatre.

"This is a very different kind of project for FT.com and we are delighted to be involved as producers of the Millennium Bridge site and hosts of the Webcam," said Martin Burke, commercial Director, FT.com. "The site gives us the opportunity to show off London, and the city's most exciting new architectural undertaking to an international audience – both to those who are already familiar with FT.com and to those who are not."

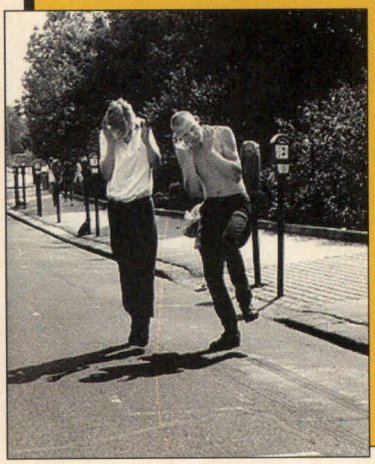


WORST OF THE WEB

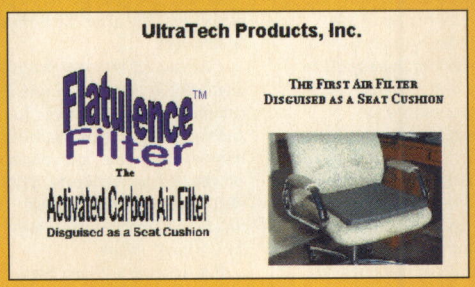
IT TAKES ALL SORTS

STILL with us after last month's air sickness bags? Good, because the Web's got plenty more to serve up, as we found on this month's journey into the dark and dingy corners of the online world.

Are you sick and tired of the usual hookers you meet? says the Furby Hooker Network at **http://www.fishdot.org/furby/index.html**. If so, then why not try a Furby Hooker – Under $70 for a lifetime's worth of action, rather than a quoted $200 per night for a real person. Not only can these Furbys learn phrases such as "Oh, Big Daddy," and "Do me right, cowboy" but they don't have pimps and they can communicate with each other. Through their infra-red eyes they can transmit messages to each other. Apparently, this means that if you're good in bed, all the Furby Hookers in the neighbourhood will know it and flock to your door wanting to sleep with you. Just check the disclaimer before calling 1-900-FURBY-SEX – "The author of this Web site is not responsible for any charges incurred by individuals dialling the number above, or for any damages to persons or Furbies using or fantasising about the product(s) depicted."



A product with slightly more use is the Flatulence Filter, available from **http://www.flatulence-filter.com**. The 15" x17" foam cushion sits on a chair and it's promised that the activated carbon filter instantly dissolves the odours that "just happen naturally." The same air filtration technology, we're told, was used in the Space Shuttle and by US soldiers during Desert Storm. Order two or more and you'll pay a special offer price of $29.95 per cushion. According to testimonies on the site this is no spoof, and does work. So if you've got gas, you know where to go.



One of the best sites we've seen this month, though, is the Van Backfire Gallery at **http://www.enrapture.com/pterror.com**. This site has been put up by chap called Howard Stone. Howard used to work as a delivery driver, a boring and badly paid job, he says. So to liven up his day he found a way to make his delivery van produce very loud backfire noises and, to add to his amusement, mounted a camera on the back of the van behind a retractable cloth shutter. Howard would then make the van backfire and photograph the chaos he created as he drove past.

What you see on this site are the hilarious results. But don't try this at home, kids...

If you're looking for an Internet service, look closely. With the new Connect service from Cable & Wireless there are no hidden costs – so there are no nasty surprises when you get your phone bill. For instance, Connect12 offers you unlimited Internet access, plus up to 12 hours of calls to the Internet, all for just £5.99 per month. You will also make great savings on the rest of your telephone bill – compared to BT – or we'll give you back double the difference.*

c&www.whatyouseeiswhatyouget

- Spend more time online without worrying about the phone bill.
- No matter how long you spend online we've got a package to suit you.
- Everything you'd expect from your Internet service, including unlimited access, 5 email addresses and 20Mb of free web space.

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* For full details of our telephone and Internet call plans and our Price Pledge terms and conditions please see our price guide or call 0800 0923 017.

CABLE & WIRELESS

<<< MORE MAIL

WANT another Web-based email account? 020 is a new Web-based email service which claims to offer a real alternative to established names such as Hotmail and Yahoo! mail. Features include email attachment handling, address book facility, draft message store, unlimited folder set-up, unlimited signatures, incoming message filtering, a customisable interface and 5Mb of Web space. See http://www.020.co.uk for more information.

The Net's no waste of time

Lesley Rice: "my personal experience of the Internet taught me how valuable information on the Web could be"

THE success of the *INX* e-zine marks a double celebration for Editor Lesley Rice. First, it's the culmination of a great deal of hard work. Second, it's the fulfilment of a promise. Two years ago, in March 1997, Leslie was diagnosed as having a rare tumour of the adrenal glands. This disturbing news came at a time when Leslie was five month's pregnant.

"The diagnosis was a total shock," said Lesley. "By this stage of the pregnancy I was feeling very well; it was difficult to believe there could be anything wrong, and my doctors were not exactly forthcoming with information, except to say that I was 'very poorly.'" In need of more information, Lesley turned to the Net.

Once sifted, the various Web sites provided plenty of information on her supposed condition. "The fact that I found out it was life-threatening was another shock, but as I read I became more and more convinced that there had been a mistake."

When treatment for the disease made Lesley worse and a third set of tests produced quite different results, Lesley's Internet studies gave her the courage to transfer to another doctor. The result was an end to her problems and a healthy baby girl.

Although it now seems clear that Lesley never suffered from the diagnosed tumour, those few months of her pregnancy were extremely traumatic and Lesley promised herself that life after the birth would be different.

"We put off so many things in life, often until it is too late," she said. "I had always wanted to write full time and my personal experience of the Internet taught me how valuable information on the World Wide Web could be if only the Net could shake off its shady, 'toys for the boys' image.

Put together with my own computing experience, the production of an Internet magazine full of solid, reliable information, seemed a natural step."

With its first edition in December 1998, it attracted readers from across the world and has around 40,000 readers a month. Subjects include regular columns on films, food and drink, Europe, football, motoring, music and travel. So next time someone tells you the Net's a waste of time, point them at **http://www.inx.xo.uk**.

NEWSBYTE

The Net can do you good, now that UK charity organisations are combining to supply free access. Users nominate a charity of their choice which then receives a percentage of the call costs. See http://www.angels.org.uk for details of the charities.

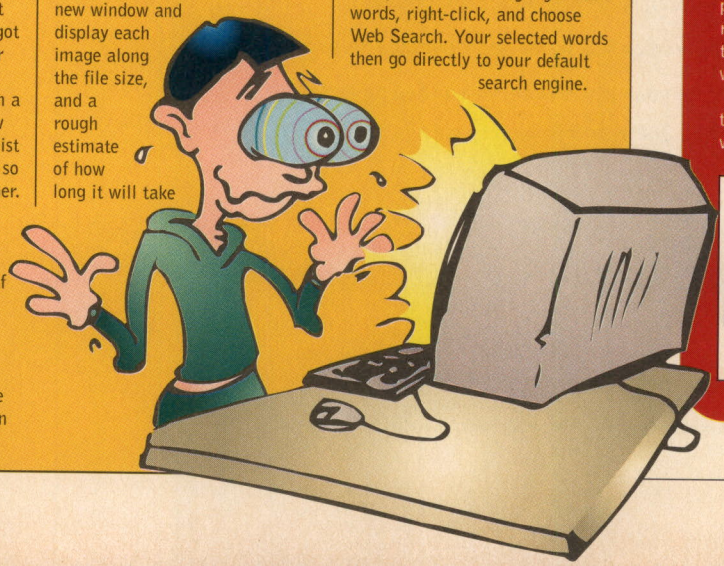
Shareware JUNKIE

WEB ACCESSORIES FOR IE 5

YOU are using IE 5, aren't you? You should be. IE 5 users can now get hold of Microsoft's follow-up, the IE 5 Web Accessories (**http://www.microsoft.com/Windows/IE/WebAccess/ie5tools.asp**). They include a few natty features to make IE 5 even better.

All in all, the Web Accessories consist of nine separate utilities. First, there's the Open Frame in New Window tool. This lets you select a part of a Web page that's enclosed by frames, and open it in a new window. Then you've got the LinkList and Image Toggler which help to speed up page navigation. If you right-click on a page and select LinkList, a new window will open displaying a list of every link on that Web page so all the links are grouped together. Image Toggler places a small button on the Links bar, which enables you to toggle images on and off with a single click. If you're after speedy browsing, keep the images off, and only click them back on when you reach a page of interest.

Moving on, and we reach the Text Highlighter which works on the same way as that of Microsoft Word – select the text, right-click, and choose highlight. The Zoom In/Zoom Out tool lets you right-click on an image and then zoom in or out of it. Nothing special there, unless you either have trouble seeing small images, or are intimidated by large ones. The Image List utility is more useful, and works in a similar way as the LinkList utility, but for images. By right-clicking on a page, the Image List will open a new window and display each image along the file size, and a rough estimate of how long it will take people to download the pictures with various modem speeds. To complete the package are two search utilities, Web Search and Quick Search. With Quick Search you can carry out Net searches via the URL address box – type in something like "av elephants" and IE will search AltaVista for "elephants." The Web Search accessory is a useful tool for when you come across words or phrases on a Web page you don't really understand. Highlight the words, right-click, and choose Web Search. Your selected words then go directly to your default search engine.

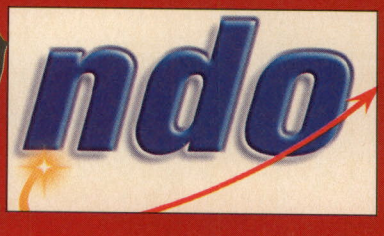


NETDIRECT LAUNCHES FREE SERVICE

INTERNET service provider NetDirect has launched a new non-subscription Internet access service – NetDirect On-Line (NDO) aimed at home Net users. Technical support is charged at £1 per minute.

But NetDirect's not simply jumping on the free access bandwagon, argues Chris Anderson, Managing Director. "There are now a growing number of 'free' Internet services available from companies whose core business is either selling groceries or holidays. NetDirect, on the other hand, is a dedicated Internet service provider with a proven track record of providing quality, speedy access, service and reliability." At the NDO launch, Anderson said that NetDirect aims to be a 'top five' ISP within the next five years.

To give NDO a try, install the software from this month's cover CD, call **0800 7313311** or visit **http://signup.netdirect-online.co.uk**.



<<< ON THE MOVE

A new Web shop has opened to cater for the needs of mobile computer users. MobileTech (http://www.mobiletech.co.uk) claims to be the first online shop dedicated to peripherals and upgrades for notebook, palmtop and handheld computers.

NEWSBYTE

If you're looking for a more interesting domain name for your email address, go to http://www.funmail.co.uk. With over 2,500 free domain names including @beergut.co.uk and @greatlover.co.uk, you'll never take email seriously again.

SUSE IS BETTER TO USE

SUSE has released its latest Linux package, version 6.1, powered by the Kernel 2.2.5. The software brings lots of new packages including the new KDE 1.1, GNOME 1.0 and two complete, free-of-charge office solutions, StarOffice 5.0 and Corel's Wordperfect 8. Multimedia fans will be glad to see the new capabilities for games, audio and video.

The new kernel brings lots of new and enhanced features, including faster kernel performance; improved performance and support for Symmetric Multiprocessing (SMP) devices; new file systems and partition types for interconnectivity; new networking core; new tunneling code; and driver support for many more devices.

SuSE Linux continues to incorporate new applications, updates and device drivers in its releases. With 80 new packages, SuSE Linux now contains almost 1,000 packages. Some of the highlights of the 6.1 release are the improved desktop environments, including the updated KDE 1.1 and GNOME 1.0. Also included is new XFree 86 3.3.3.1 support for all 3Dfx cards and Ghostscript 5.10.

SuSE Linux has also improved its multimedia capabilities. It includes two new versions of the OSS sound driver, supporting virtually all popular ISA cards and most common PCI cards. MPEG files can be played by Xaudio and MpegTV Player. New drivers for radio cards, framegrabbers, digicams, video and TV cards are also part of the distribution. For the first time, the kernel now supports a number of joysticks, including gamepads for Nintendo and PlayStation.

English, French, German and Italian Versions are on the market at a price of 46 Euro. For a detailed list of everything that's new on 6.1, have a look at: **http://www.suse.de/e/lx61/new_in_6.1.html**.

WIREPLAY IN THE MIRROR

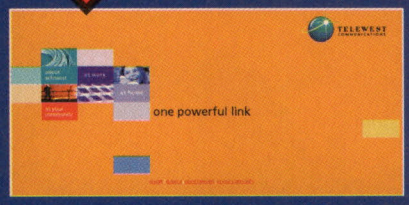
WIREPLAY, the popular UK dial-up gaming service, is joining forces with the Mirror Group, to become the major provider of online gaming content for ic24, the *Mirror's* free Internet service which was launched on 30 April.

"It is our aim to spread the word on online multiplayer gaming to the widest audience possible," said Oscar Clark, Marketing Manager for Wireplay, "and we are confident that this tie-in with the Mirror Group's new Internet service will bring us a whole host of new gamers."

Making use of the Mirror Group's media content, ic24 will combine news, sport, entertainment, pictures, business, games, TV listings, weather and online shopping. Subscribers to the new service will receive five free email accounts, 10Mb of personal Web space and a 24-hour telephone support line costing 50p per minute. For further information, see **http://www.wireplay.co.uk** and **http://www.ic24.net**.

Subscribers to the Mirror Group's ic24 will be able to take advantage of the great gaming content provided by Wireplay

Gates bought a share in cable company Telewest and arch-rivals NTL



Gates targets UK cable industry

BILL Gates now wants control of your television set. The Microsoft boss has spent the last three months buying his way into the UK cable industry. The aim is to ensure that Microsoft software will remain the standard for delivery of the Internet into the home.

The story begins in February when Gates decided he would like a stake in NTL. Then Gates looked to NTL's arch rival, Telewest. Gates bought a 29.9 per cent which is worth around £2bn.

Finally, as we went to press, he's rumoured to be buying a 30 per cent stake in Cable & Wireless's Communications. This will mean that the world's wealthiest man will own stakes in the top three UK cable companies.

"Microsoft's primary interests is in the US market," John Mahoney of analysts Ovum told us. "But it does believe Internet access via high-speed broadband cable services is going to become very important in the UK."

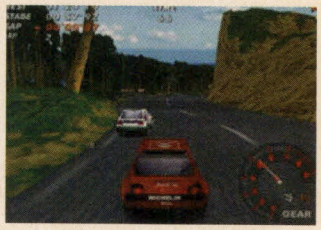
The company is pushing its Windows CE software, a slimmed down version of its operating system which is used in many handhelds. It's clear that the OS will form a part of at least the NTL set top box. Microsoft is also relying on the cable network to deliver broadband access, but Gates may not have banked on the fact that over half the houses in Britain can't get cable.

"Microsoft thinks that broadband access to the Internet will be such a compelling proposition that 70 per cent of homes will cable will sign up to it, but they don't seemed to have taken into account that the customer has alternatives such as digital interactive services delivered by satellite (such as Sky Digital) and terrestrial-based (Ondigital)."

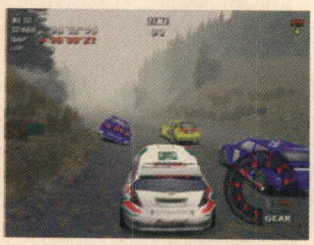
Pick up a slightly used **Lara Croft!**
Click **QXL Exchange** on **www.qxl.com**
qxl
Europe's Online Auction

Drive time

INFOGRAMES
UNITED KINGDOM



Put your pedal to the metal and win a copy of V-Rally!



Easy right! Hard left! Yes, it's rally time out on the Net, and ever-eager to tool-up *Practical Internet* readers, we've got five copies of the top rally-sim V-Rally to give away. After selling 2.5 million units on the Playstation, this popular rally simulation is now available for the PC. Take the wheel and you'll blast through eight different countries experiencing some truly original and realistic course conditions. Rain, mud, snow, gravel, sand and dust... You'll face the lot through both day and night stages. Master the art of skid control, power sliding and jumping to become the V-Rally champion. V-Rally's frighteningly realistic and thrilling visual and audio effects with the might of the PC and an unbelievably exciting network option, means the only thing that comes even close, is the real thing. For more information see **http://www.v-rally.com**. Other smart features of this game include:

- Stunning 3Dfx accelerated graphics
- Multiplayer features allow up to four players (Internet and LAN connection)
- 12 powerful cars of the WRC Championship
- 42 tracks in eight different countries
- Three gameplay types: arcade, championship, time trial
- Different weather conditions recreated (snow, rain, fog, night, sun)
- Different types of surfaces including asphalt, gravel, mud and sand
- Force Feedback

To be in with a chance to win a copy of this game, worth £24.99, rack your brains to answer the following question:

How many countries do you drive through in V-Rally?

Email your answer to **pi@paragon.co.uk** with the subject heading 'V-Rally competition' (don't forget to include your name and address) or send it on a postcard to: V-Rally competition, Practical Internet, Paragon Publishing, Paragon House, St Peter's Rd, Bournemouth, BH1 2JS.

Closing date for entries is 1 July 1999. Employees of Paragon Publishing, Infogrames and anyone associated with these organisations may not enter. Multiple entries will be disregarded. The Editor's decision is final and no correspondence will be entered into. From time to time you may be sent news about exciting new products and opportunities that are of interest to readers. If you do not wish to receive such information please let us know.

E.T. The Extra-Terrestrial TM & © Universal Studios

BT tops the charts.

Internet Magazine run provider lab tests which put the UK's top service providers through a rigorous set of performance challenges. BT have been quoted as 'the best performing free provider' in the May 1999 edition of Internet Magazine. So, for free*, easy and instant access to the internet call BT.

Free*fone 0800* 800 001
or visit www.btclick.com

BT *Stay in touch*

*LOCAL CALL COSTS APPLY.

Net shopping

FLIGHTS
NO.7
in a regular series

If you want to take to the skies, these sites will get you where you need to go

Cheap Flights

http://www.cheapflights.co.uk

A really handy site that gives a general idea of how much you can expect to pay for flights all over the world, plus links to the people who supply them. Along with all these flights of fancy, you can get the latest in holiday bargains

Bargainholidays.com

http://www.bargainholidays.com

The perfect place to find late-availability. As well as the flight-only deals, there are plenty of packages to keep you happy. You won't find a choice of everywhere in the world, but there are still plenty of destinations to choose from

British Airways

http://www.british-airways.com

The world's favourite airline has a decent Web site, and you can check fares and flight availability online, as well as that all-important ordering online facility. And once you have booked, you can even check what film you'll be watching.

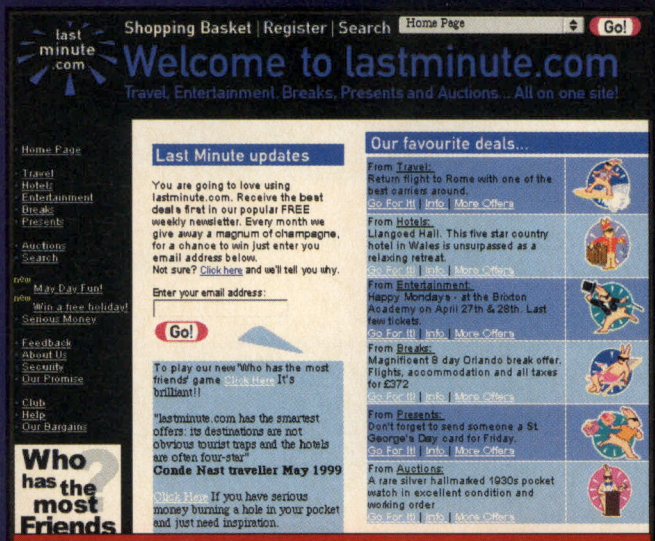
easyJet

http://www.easyjet.com

From the world's favourite airline to the Web's favourite airline (apparently) easyJet offers you cheap and cheerful flights to a variety of destinations. Simply enter where and when you want to go, and you'll be presented with your flight options

TOP TIP

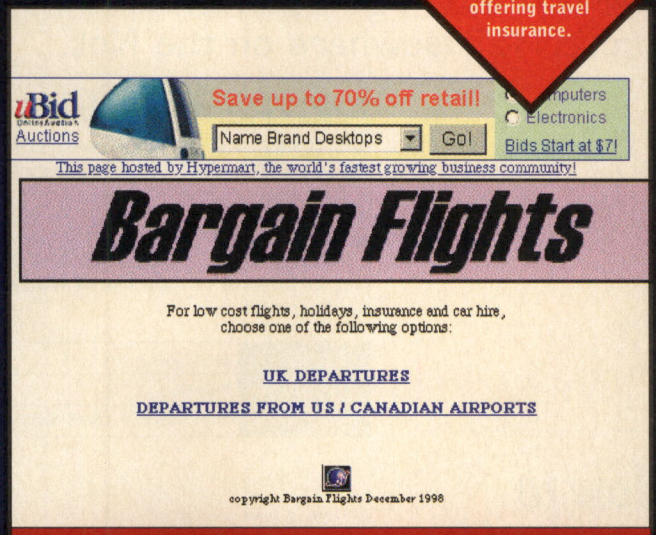
After you've booked your flight over the Net, you can also use it to sort out that essential travel insurance. Try Screentrade (http://www.screentrade.co.uk) for a consortium of leading UK insurance companies offering travel insurance.



Lastminute.com

http://www.lastminute.com

Guess what's sold here? That's right, last minute flights. The procedure is familiar – enter where and when you want to fly, and it will come up with available flights, along with prices



Bargain Flights

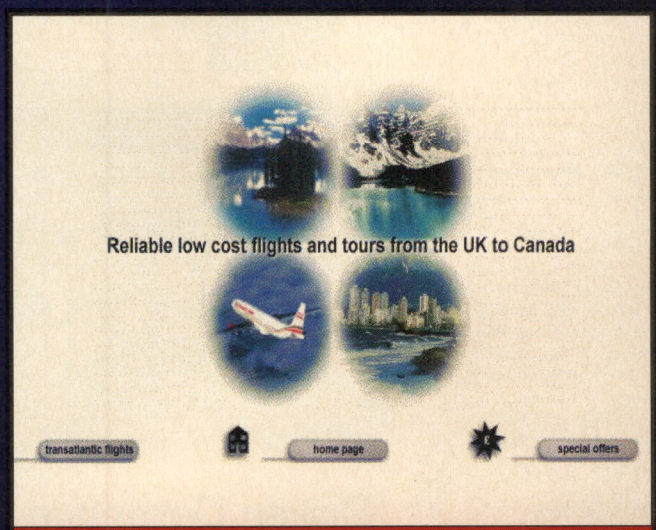
http://www.bargainflights.com

As well as finding out about car hire, parking and holidays, Bargain Flights has also got an excellent flight search facility that caters for scheduled and chartered flights

All-Destinations

http://www.all-destinations.com

As the name would suggest, this site has oodles of flights to everywhere in the world. Separated into European, Worldwide and America and Canada, you'll find some real bargains ripe for the picking



Canadian Affair

http://www.canadian-affair.com

With its clean air, culture and safety record, Canada is fast replacing the States as the transatlantic destination of choice. Get your cheap flights here and see what the fuss is about

What's on the disc?

If you want to sort out hassles on your PC then you've come to the right place. Here's a fine selection of technical tools to keep your PC happy and pinpoint problems occurring elsewhere on the Net...

How to use the CD

THE CD supplied will autorun in Windows 95/98. If not, simply choose 'Run' and then type in X:\pi.exe (where X is the letter corresponding to your CD drive) before pressing the Return key.

If you have any problems with getting your ISP accounts running, please call the numbers listed on the relevant disc page in the magazine. Any other problems with the disc, please call our disc help line on **01202 299900 ext. 259** between 10am and 4pm.

Please note:

When setting up the trial accounts and software on the CD, don't keep installing different versions of Internet Explorer on top of one another. Before you install a new version, always uninstall the previous one. This is done via the 'Add/Remove Programs' function.

Disclaimer

All software on this CD is strenuously tested for known bugs and viruses. Paragon Publishing will not accept liability or responsibility for loss or damage that occurs directly or indirectly from usage of this disc. We will replace discs that have been damaged in transit or at the place of duplication, upon return to our offices.

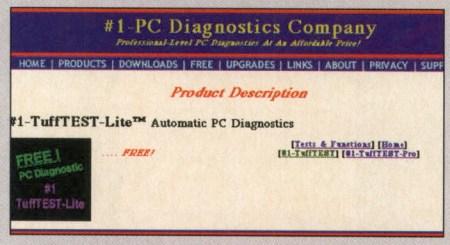
Add/Remove Pro 1.03

ADD/REMOVE Pro displays the contents of Windows Add/Remove Programs list and checks if each entry is valid. It displays an icon with each entry to show if an entry has a broken link, a link to a missing disk, or a good link. A checker lets you test the validity of the Uninstall String. Add/Remove Pro allows you to uninstall the selected program or remove the entry from the Windows Add/Remove Programs list.

Product:	Add/Remove Pro 1.03
Licence:	Freeware
URL:	http://superwin.com/freeware.htm

#1-TuffTEST-Lite 1.52c

THIS rather oddly named piece of software is a PC diagnostics utility which has been specifically designed so that you can test their PC's basic hardware without having to call in the professionals. The software is self-booting and has its own operating system.

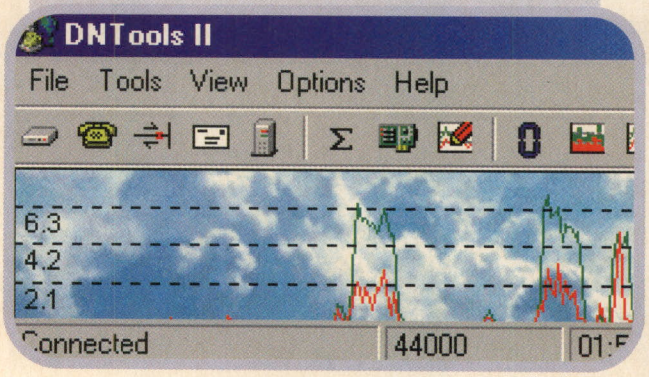


Product:	#1-TuffTEST-Lite 1.52c
Licence:	Freeware
URL:	http://www.tufftest.com/tt01-lite.htm

DNTools

DNTOOLS gives you access to the settings in the registry governing your Windows 95/98 Dial-Up Networking options, allowing you increased power over your connections. It also features a TCP/IP meter, which gives you a graphic representation of your connection statistics. Add to this an auto-ping function to keep your connection from getting dropped by your ISP, a timer and other utilities, and you've got a useful suite.

Product:	DNTools
Licence:	Shareware
URL:	http://www.atmosoft.com/DNTools/index.html



ADing BAR 1.10

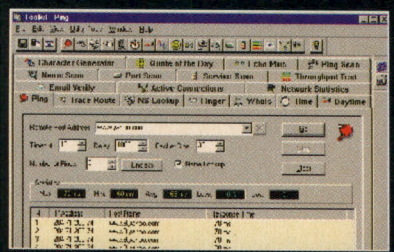
ADING BAR is a useful little application which sits on your screen and displays a load of information about your system. The information includes date and time, system resources, and free space on your disks. With a mouse click you can run programs, set an alarm, view a calendar, or exit Windows.

Product:	ADing BAR 1.10
Licence:	Freeware
URL:	http://members.xoom.com/AD_ing

Internet Anywhere Toolkit

INTERNET Anywhere Toolkit is a set of useful diagnostic utilities for both new and experienced Internet users. It comes complete with ping, finger, whois, traceroute, name server lookup, time, quote of the day, ping scan, port scan, name scan and service scan. You can copy the results to the clipboard, save them to a file, or email them to a friend

Product:	Internet Anywhere Toolkit
Licence:	Shareware
URL:	http://www.tnsoft.com



Driver Detective 1.04.0002

DRIVER Detective will tell you your current version of drivers, DLLs, and VXDs. With the information this program gives you, you'll know if you need to download a later version or if you are already using the current driver. Driver Detective makes a program group on the Start menu and you can run it at any time from there.

Product:	Driver Detective 1.04.0002
Licence:	Freeware
URL:	http://www.drivershq.com/dd/indexdd.html

Universal Whois

IF you have any sort of trouble or question about an Internet domain, then this program will help you. It indicates if the domain actually exists, the people or organisation behind it, and their contact details. This means that the software is also useful for tracking the perpetrators of spam.

Net Services
Using the Internet to link *people*

Product:	Universal Whois
Licence:	Freeware
URL:	http://www.netservs.com/spam/whois.htm

DU Meter

DU Meter 2.0 is a user-friendly tool that helps you to use your Internet connection more efficiently. The program lets you see how much of your full bandwidth potential is actually utilised at any point in time, with a choice between a real-time graph or numerical display – or both, if you like. DU Meter works with dial-up, ISDN, cable modem, and ethernet cards.

Product:	DU Meter
Licence:	Shareware
URL:	http://www.hagel.threadnet.com/dumeter

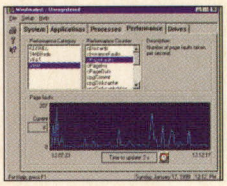
Spike

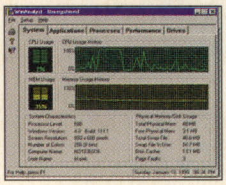
SPIKE is a very small suite of Internet applications, including ping, traceroute, finger, and more. It performs well, fits in the system tray, and uses almost no system resources.

Product:	Spike
Licence:	Freeware
URL:	http://radsoft.net

WinAnalyst 1.00

WINANALYST gives you general information about your system, its memory and its drives, as well as details about applications, processes and performance. Its basic functionality lets you watch key system factors, such as processor and memory utilisation. This information is presented graphically and on a taskbar. Other features include indicators of virtual memory usage, swap file usage, disk cache usage and page faults. This program is very useful in helping you to understand of the inner workings of your PC and potential performance problems.

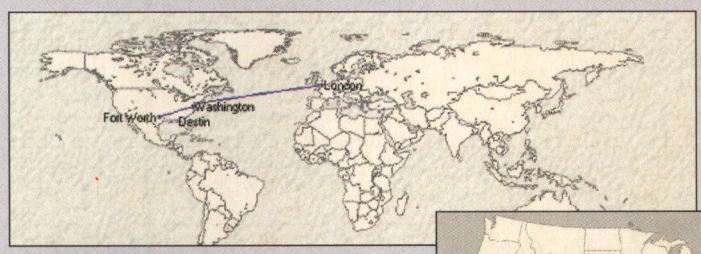


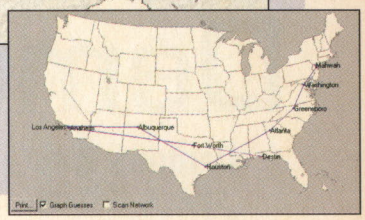


Product:	WinAnalyst 1.00
Licence:	Shareware
URL:	http://www.bluesoftware.com/winanalyst.asp

VisualRoute

VISUALROUTE is a traceroute utility that is great for checking connectivity problems. It shows the connection points on a large world map, allowing you to see the actual routing of your connection. VisualRoute also compiles data regarding the connection and graphs it for you, so it's easy to understand the information.

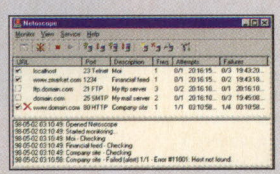




Product:	VisualRoute
Licence:	Shareware
URL:	http://www.visualroute.com

NETOSCOPE

NETOSCOPE is an Internet monitoring program that allows you to watch over and log Web, FTP or mail server actions. It then notifies you about the problem or fixes it if possible.



Product:	NetoScope
Licence:	Shareware
URL:	http://www.basta.com/ProdNetoscope.htm

Micro 2000 Year 2000 Test 3.2

MICRO 2000's Year 2000 test will check your PC to make sure it will healthy on 1 January 2000. This test will check your BIOS and Real Time Clock in detail as well as Leap Year calculations. Another feature allows you to view all the clocks at once (O/S clock, BIOS clock and RTC clock) and see how they react to the rollover. This program should be run in DOS mode.

Product:	Micro 2000 Year 2000 Test 3.2
Licence:	Freeware
URL:	http://www.micro2000.com

simon 1.0

SIMON can give you the information you need to keep your desktop running smoothly by monitoring your network connection, disk space, CPU utilisation, and memory activity. The software displays its status on a taskbar tray icon while working in the background to monitor your system for problem-free operation.

simon says... SM
Welcome!

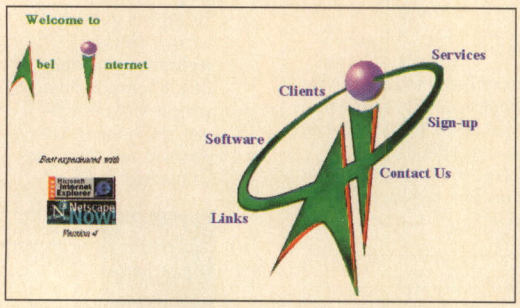
Product:	simon 1.0
Licence:	Freeware
URL:	http://www.powercenter.com

Save Butt

IF you've ever deleted the wrong file or lost a file due to a crash, the aptly named Save Butt is what you need. Every time you change or delete a document, Save Butt copies it to your hard drive, removable drive or network server. If something then happens to your file, Save Butt allows single-click recovery.

Product:	Save Butt
Licence:	Shareware
URL:	http://www.savebutt.com

Abel Gratis



Ready, willing and Abel – and free as well!

Abel Internet, already well established and respected for its quality chargeable services since 1990, has now launched Abel Gratis, its new free service offering full Internet access and email facilities on a local call rate number.

Abel Gratis offers you full unlimited free access to the Internet with no hidden charges at speeds of up to 56k as well as an unlimited multi-user email address. Choosing Abel Gratis will also entitle you to 50Mb free personal Web space. Your free Web space includes free Statistical Reports. Abel feels strongly that its corporate and home user clients' email addresses should not have any indication of an overtly free service. To remedy this situation Abel Internet is the first Internet service provider in UK to offer all its clients, both business and private, a choice of 50+ domain addresses to choose from with their free service. For example, yourname@.the-office.org.uk, yourname@far2sexy.co.uk. This saves the small business users the expense of a full domain name. For more information see **http://www.abelgratis.com**.

Abel Gratis' technical support line is available daily, from 9am to 11pm at the rate of only 25p per minute at all times. As well as the new Abel Gratis service Abel Internet continues to offer its chargeable services for modem, ISDN and leased line connections to the Internet. Abel Internet's chargeable services are going to be reduced and are suitable for business or private use and technical support is free with the chargeable service. Abel was the first UK ISP to produce a 32-bit dialler software that sets up Dial-Up Networking in Windows automatically and now is the first UK. ISP to offer multi-choice domain name ending to their clients. Abel Internet, as part of its general upgrades, now offers SMTP both ways for email, as well as POP3, along with a third DNS server and a fourth proxy server.

Abel Internet is currently in the process of setting up games servers as part of its package of additional added value services available to its clients. Abel Internet is one of the few ISPs who, in addition to Apple Mac and Win 3.x, supplies software specifically for the Amiga – call and ask for your free connectivity software. Abel thinks that any company with a client-base should become a virtual ISP and is happy to provide this service no matter how big or small that client-base may be. Business customers will also be interested to learn that Abel Internet is also an Authorised Sun Reseller and can provide professional advice for all your LAN, WAN, Internet or intranet requirements.

Service Provider:	Abel Internet
Free time:	Life
Modem speeds:	Up to 56k (x2, K56Flex, V.90)
Technical support:	Abel Gratis: 0906 680 4444, Abel Internet: 0131 445 5555
Sales Enquiries:	0131 445 5555
Web site:	http://www.abelgratis.com, http:// www.abel.net.uk
Monthly rate:	Free
Annual Rate:	Free
Platforms:	Win 3.x, 95, 98, NT4, Mac (Call for Amiga)

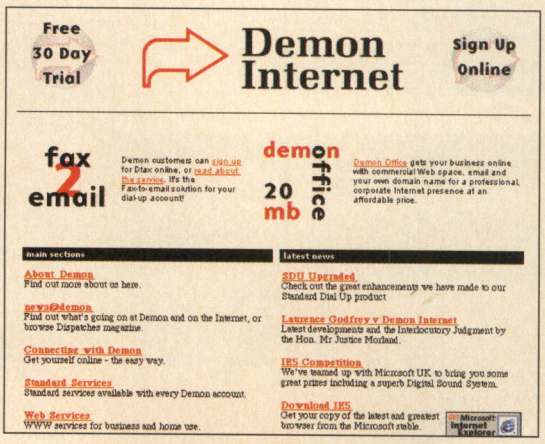
Demon Internet

Demon's Web space can be used for business or personal use

With over 250,000 dial-up subscribers, Demon Internet is a real success story. It gives you unlimited email addresses and free 24-hour technical support. The home pages service provides all standard Demon Internet dial-up customers with their own virtual Web server, including 20Mb Web space and a unique URL of the form http://www.hostname.demon.co.uk/ where hostname is the name you chose for your dial-up account. Even better, you'll get two RealAudio streams to add sound to your site. Your personal home page space isn't restricted to personal use, either. Demon is happy for you to use your Web site to promote your business venture if you so choose. This makes it an idea place to test any commercial ideas you have, and if you find that they are successful and you need more server space, Demon can then provide you with a commercial account. If you're into online gaming, you'll be pleased to know that Demon has games servers for Quake, Quake II, Unreal, NetStorm and Half-Life with free access to a dedicated games Web site carrying games information and news. Demon also offers an ISDN service for the same price as the standard dial-up service – £10 + VAT per month. And you can access your Demon Internet account using an Orange phone with the appropriate fax and data card and a laptop computer.

New and existing customers can take advantage of Demon's Dfax technology free of charge for one year. This email/fax gateway allows you to receive faxes as emails, send emails to fax machines, and pick up faxes wherever you are.

Sign up and you'll also get the Demon Internet regular magazine – Dispatches – sent to you free of charge. The software supplied is Windows only. If you need Mac software, call Demon.



Service Provider:	Demon Internet
Free time:	30 days
Modem speeds:	Up to 56k (x2, K56Flex)
Technical support:	0845 272 2444
Sales Enquiries:	0845 272 2666
Web site:	http://www.demon.net
Monthly rate:	£11.75 (incl. VAT)
Annual Rate:	£141 (incl. VAT)
Platforms:	Win 95, 98, present on MacOS 8.5 or later

FreeUK

No subscription charges – here's the service with "style and a smile"

FreeUK is a new, free, independent Internet service provider serving the Internet community within the UK. It offers a completely free alternative to traditional 'paid for' Internet access and email services.

FreeUK says it is different because its values take the Internet back to its roots – the firm says it does not exist simply as a commercial platform for banner advertising.

FreeUK has created its own set of pledges, which it promise to honour. These are:

- We believe the Internet should be free
- We don't believe in subscription charges
- We don't believe in monthly fees
- We don't believe in set-up charges
- We pledge to bring you this service with style and a smile!
- We will remain true to our core values of quality and style

A FreeUK account is the ideal Internet solution for anyone, whether you're are a new user to the Internet or an existing user looking for a refreshing alternative to your current ISP. The service is designed to be easy to use as well as including stylish factors that are often overlooked by ISPs.

Your FreeUK account gives you unlimited Internet access, 25Mb of Webspace to play with, newsgroup access, unlimited email addresses and a 24-hour technical support hotline in case of any problems.

The provider supports V.90 modems, ISDN and Windows 95, Windows 98, Windows NT and iMac operating systems.

Service Provider:	FreeUK
Free time:	Life
Modem speeds:	56k (V.90)
Technical support:	0900 9000 999 (50p/min)
Sales Enquiries:	0900 9000 900 (50p/min)
Web site:	http://www.freeuk.com
Monthly rate:	Free
Annual Rate:	Free
Platforms:	Win 95, 98, Macintosh

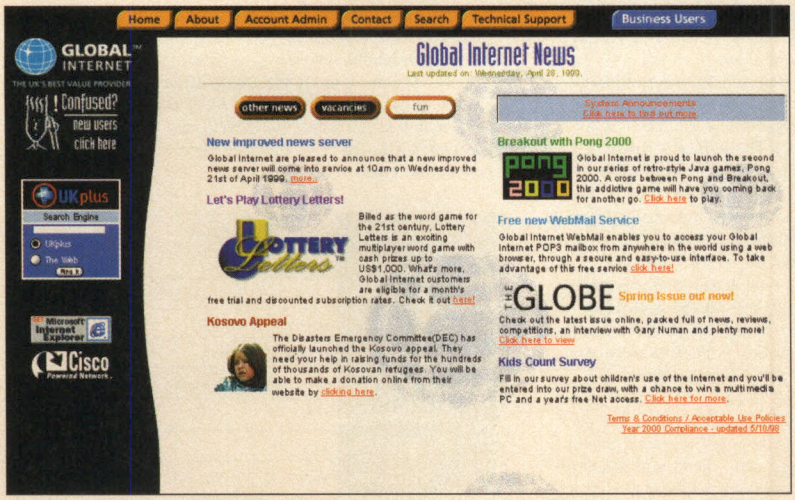
Global Internet

Low cost, high quality Net access for a fixed subscription fee

Global Internet provides low cost, high quality connectivity to the whole Internet for a fixed subscription fee – there are no hidden costs or hourly charges, so now is the time to get connected. You have nothing to lose with Global's one month free trial.

The CD-ROM on the front cover disc contains all the information and software you'll need to get online straight away – unlimited Internet access, unlimited email addresses, 50Mb of free Web space. And all this for the cost of a local BT phone call.

To get connected simply follow the installation instructions on the CD. Once the software has installed, please click on the 'Internet Explorer' icon on your desktop. Follow the instructions on screen. You should make sure you have your credit/debit card to hand as you will need this to create your account.



See Global's current advert in this magazine for further information and prices. But if you want a recommendation then look no further – Global Internet was voted 'The Best ISP on the Planet' by *Internet* Magazine in December 1998.

If you do have any problems you can call for free technical support advice on **0870 909 8181**. The support line is open 24 hours a day, 365 days a year. Please note: free trials are only available on single access dial-up accounts created online by credit card. Limit of one free trial per household and you must be 18 years or over to apply.

Service Provider:	Global Internet
Free time:	One month
Modem speeds:	Up to 56k (x2, K56Flex, V.90)
Technical support:	0870 909 8181
Sales Enquiries:	0870 909 8000
Web site:	http://www.global.net.uk
Monthly rate:	N/A
Annual Rate:	£89.99
Platforms:	Win 95, 98 (Call for NT or Mac)

NetDirect On-Line (NDO)

Introducing a brand new service from NetDirect

NetDirect provides high quality, award winning Internet access with a range of extra facilities included in its new and free Internet access package – NetDirect On-Line (NDO).

The software can be installed from the Practical Internet covermount CD – simply click on 'NetDirect' in the 'Service providers' section.

The NetDirect On-Line software is easy to use. Once the program has loaded, simply click on the NDO button to the right of Internet Explorer. Proceed with the installation and follow the onscreen prompts. Once your computer has restarted after the install process, double-click on the Internet Explorer icon. This can be found on your desktop and will initiate the connection and sign up process.

Please note that if you have a newer version of Internet Explorer 4.01 SP2, then do not install this software. Simply refer to the online sign up instructions on **http://signup.netdirect-online.co.uk**.

More details on NetDirect's services are available from its sales department on **0800 731 3311**, or by email at **info@netdirect.net.uk**.

NetDirect is one of the first non-subscription based Internet access packages from a dedicated Internet service provider (ISP). There are no connection fees, no monthly subscription charges and no set-up fees. Every NetDirect On-Line subscriber benefits from 100 per cent nationwide local call access, fast access speeds of up to 128kbps, free sub-domain and unlimited email addresses (someone@yourchoice.ndo.co.uk), 20Mb of free Web space and technical support from NetDirect On-Line's dedicated team, 24-hours a day, seven days a week.

NetDirect On-Line offers unlimited Internet access and gives you the latest online news, sport, entertainment, computing news and a whole lot more, including an exclusive kids' channel.

For technical support, please contact the NetDirect On-Line (NDO) Technical Support team by telephone on **0906 55 88 550**. Calls are charged at £1.00 a minute at all times. Alternatively, you can email **support@netdirect-online.co.uk**. There is also a support Web site at **http://support.netdirect-online.co.uk**.

In addition to the services detailed here, NetDirect also provides Internet access and services to connect businesses to the Internet. More details are available from sales on **0800 731 3311**, or by email to **moreinfo@netdirect.net.uk**.

Service Provider:	NetDirect Internet
Free time:	Life
Modem speeds:	Up to 56k (x2, K56Flex), 128k ISDN
Technical support:	0906 55 88 550
Sales Enquiries:	0800 731 3311
Web site:	http://www.netdirect.net.uk
Monthly rate:	Free
Annual Rate:	Free
Platforms:	Win 95, 98, NT, Mac

Pipemedia OnLine

Pipemedia offers "simply straightforward Internet access"

Pipemedia OnLine is offering a no-obligation 30-day free trial, with unlimited access. Suitable for both home and business use, the CD will install all the software you'll need to get connected. You won't need a credit card or bank details to get started, just a modem and a phone connection to register online. With Pipemedia, you access the Net for a local call rate anywhere in the UK, and it also offers a national call rate number for any phone company or cable deals you may be able to take advantage of. Pipemedia is committed to providing speedy Internet access and no engaged tones. But don't just take their word for it; Pipemedia has received consistently good rankings in the Internet publications in terms of speed and reliability. If you have a high speed modem, things are even better, as Pipemedia offers full speed connections for ISDN, K56Flex, x2 and V.90 56k technologies. And if you have any difficulties, helpful technical support is available at all times of the day and night.

Pipemedia OnLine is launching a brand new Internet fax service for business Internet users. The service is called FaxServe and consists of the following: each customer is assigned their own 0845 (local call) fax number. This number is for incoming faxes only. You advertise this number as your fax number. When faxes are received to this number the fax is emailed, as an attachment, to you, or you can view and print/delete your faxes through a secure Web page using a Web browser. For more information call **01455 828218** or email **info@faxserve.co.uk**, or see **http://www.faxserve.co.uk**.

The Pipemedia installation includes all the free software that you need. The software included is for the Apple Macintosh, Windows 3.11, 95, 98 and NT.

Windows users just run the software from the CD and click the install icon to load the latest version of Internet Explorer 4, Outlook Express (for email and news), along with Microsoft Netmeeting and Comic Chat. Apple users just need to click on the installer icon.

With a Pipemedia subscription you'll also get free Web space, and the option of multiple email accounts. Web designers should note that it is possible to use Microsoft FrontPage extensions and Active Server pages on Pipemedia's Web servers. Businesses also benefit from a range of services, such as server hosting, domain name registration, and Web site design. Pipemedia also offers an interactive 'OnLine System' for its own subscribers running through normal Web browser software leaving you free to choose where you want to go on the Net, with full "Simply Straightforward Internet access."

If you don't want to try the service straight away you can find out more by taking a look at the Web site at **http://www.pipemedia.co.uk** or by emailing **sales@pipemedia.net**. And if you don't have Net Access, you can call Pipemedia on **01455 82 82 18** for more information. As well as the rates shown below, Pipemedia is also offering three-month subscriptions for £29.38, and with all dial-up accounts purchased home users will receive a free uk0.net domain, for email.

Service Provider:	Pipemedia OnLine
Free time:	30 days
Modem speeds:	Up to 56k (x2, K56Flex, V.90) + ISDN
Technical support:	01455 82 82 18
Sales Enquiries:	01455 82 82 18
Web site:	http://www.pipemedia.co.uk
Monthly rate:	£11.75
Annual Rate:	£117.50
Platforms:	Win 3.x, 95, 98, NT, Macintosh

Virgin Net

Already a popular ISP, now Virgin is free – even better!

This month's cover CD also offers free Net access with Virgin Net. Connecting to the Internet with Virgin Net is so easy anyone can do it – and it only takes five minutes.

Just place your free CD from the cover into your computer and follow the simple on-screen instructions. All the software you need is on the CD and once you're online you will find out how easy Virgin Net has made it to get the best of the Internet.

There's an Education Channel, which is a very easy way to help your children with their homework. Virgin Net's exclusive reference service is based on the Living Library used in schools throughout the country, and all material fits in with the Core Curriculum.

Once you've done your homework, why not turn on, tune in and listen to thirty different radio stations around the world on the Virgin Net Radio Tuner, from Radio Beethoven in Chile to Beach FM in Japan. If you prefer the chants of the terraces to the chants of the choirs, you can even listen to live coverage of your favourite Premiership team.

Virgin Net's Cinema Channel helps you plan a night out, telling you what's on (with previews) in just about every cinema in the country. It also gives you guides to local pubs and restaurants. Or the national gig guide will tell you who's playing and where.

The Travel Channel has got all the essential information you'll ever need for your holiday: climate, top attractions, visa requirements, tourist board, embassy numbers and accommodation.

With Virgin Net you also get customer service helplines, which are open 24 hours a day, 365 days a year; five email addresses; 10Mb of free Web space and a fast, reliable, quality service. Install your CD now, connect with Virgin Net and enjoy the best of the Internet. There are two options available with Virgin Net – the service is free if you pay £1 per minute for tech support as and when you need it, or you can opt for the £5.99 per month scheme which gives you unlimited tech support calls at local rates.

Service Provider:	Virgin Net
Free time:	See text
Modem speeds:	Up to 56k (x2, K56Flex); ISDN
Technical support:	0845 650 0000
Sales Enquiries:	0500 55 88 00
Web site:	http://www.virgin.net
Monthly rate:	Free/£5.99
Annual Rate:	Free/£71.88
Platforms:	Win 3.x, 95, 98

X-Stream Network

Get online with the UK's first provider of free Net access

The X-Stream Network was the UK's first provider of 100 per cent free Internet access. Users enjoy 56kbps connections as well as email, games, Web browsing and Web hosting at absolutely no cost (the only bill will be for your telephone, and these calls are based on local rates).

Before you start the installation you will need the following components installed on your PC: Windows 95/98, Dial-Up Networking (including TCP/IP), Internet Explorer (version 3.02 and above), and a modem.

To install the X-Stream software, run this month's CD-ROM and select 'X-Stream' from the ISPs on offer. Follow the set-up procedure, read the agreement form and choose the call rate that you wish to use (0845 local rate). If you need to dial a prefix to access an outside line it should be entered on the call rate screen. Your set-up is now complete.

Double-click on the X-Stream desktop icon to start the software. Once the software is running click 'Connect.' The software will access your telephone line connecting you to the Internet.

You must first register a new account (Click on 'New Account'). The first screen will ask you for a username, a password and a confirmation of your chosen password. (When completed click on Stage 2 to continue). Fill out the registration form. Press 'Continue to Stage 3.' When registration is complete a welcome note will be displayed.

If you require a free email account click 'POP3 email now.' If not, click 'log me in.'

To log on in the future, simply double-click the X-Stream icon, enter your username and password and click 'log me in.' A small toolbar will appear on the top of your screen. You are now connected to the Internet.

To take advantage of the free email, choose your email address, a password and confirm that password. Click 'Submit.' Once registered your email account details will be shown. It is very important that you write this information down. Click 'log me in' to log on to the Internet.

To configure your email, open your email client and enter your personal details (email address, password etc.) Email can only be used by connecting to X-Stream first then using the email client to check your mail (your mail client cannot directly dial up to the mail servers). If you're have any technical problems with installing the X-Stream software please call the support line on **0900 901 1000**. All calls are charged at 50p per min. If you have any general queries on X-Stream call the office on **0870 730 6466** for assistance.

Service Provider:	The X-Stream Network
Free time:	Life
Modem speeds:	Up to 56k (K56Flex)
Technical support:	0900 901 1000
Sales Enquiries:	0870 730 6466
Web site:	http://www.x-stream.com
Monthly rate:	Free
Annual Rate:	Free
Platforms:	Win 95, 98

AOL

Go 4 Gold with the all new AOL 4.0i free 100-hour trial

The new version of AOL is here – AOL 4.0i GOLD. And with it comes some big changes that will make your Internet experience even better – new look, easier navigation, and lots of amazing new features. One-step Web access, customised email with automatic spell check, personalised toolbar – just a sample of what awaits. With a significant advance in functionality and performance, AOL 4.0i GOLD provides the innovation and services that have made AOL the world's biggest Internet online service.

Getting started on the Internet couldn't be easier with the world's No. 1 Internet online service provider, and now with AOL 4.0i GOLD you have an even greater interactive world to explore. All you need is a PC, a modem, and a phone line. And, of course, your free 100-hour trial. Just install the AOL CD that's on the cover and you are less than five minutes away from your first Internet experience.

Hey, good looking...

AOL 4.0i GOLD has a brand new look. It has been redesigned to bring you an even faster and easier online experience. All 17 channels are listed down the left of the main screen for easier navigation, and with lots of exciting new features you'll have lots to explore

With the new one-step Web access feature on AOL 4.0i GOLD, getting on the Internet is even faster than ever. Simply enter the Web address/URL in the input box on the toolbar, click on the forward button, and you're there. And with the world-renowned Microsoft Internet Explorer 4.0 as your integrated Web browser, you're guaranteed an easy-to-navigate, exciting online experience you can't get anywhere else, with full access to all the top sites.

New tools and features

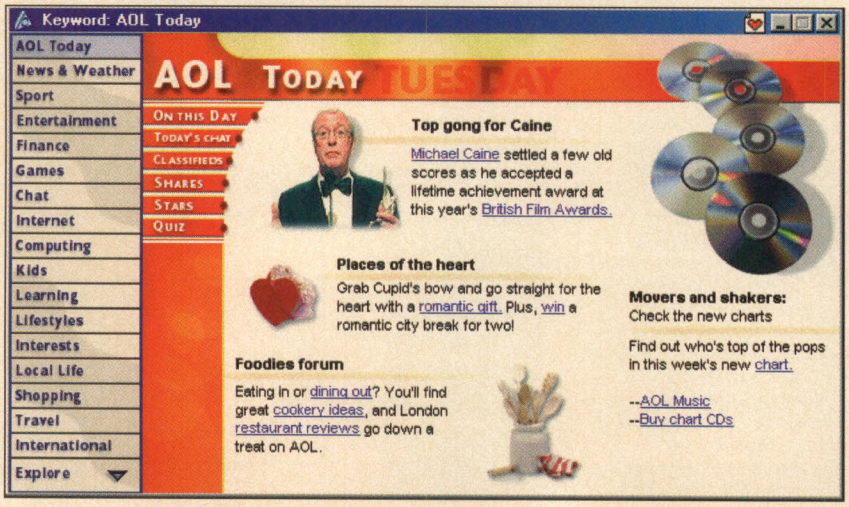
The new toolbar not only allows you to go directly to Web sites, but also directly to any AOL area, as the Keyword field is incorporated into the toolbar. You'll find you can use it for almost everything you do on AOL. It's now fully customisable, so you can add or remove buttons, or collapse it to display text labels only. You can even personalise it by adding your own favourite areas, or keep track of the last 25 areas or Web sites you visited.

WIN! A Golden 4X4 worth over £20,000! See online for details

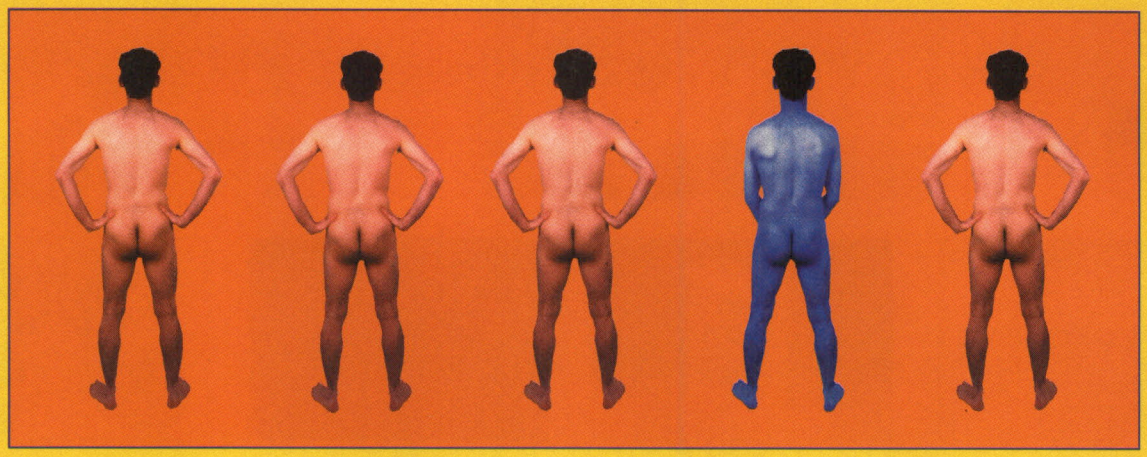
And that's not all. Your emails will never be the same with AOL 4.0i GOLD. Now you can liven up your emails with pictures and images that appear right in the text of your messages, and attach up to nine files at one time to a single email. You can even customise them with a personal letterhead, font, colours and typestyle. And if it's spelling errors or common grammar mistakes you're worried about, then have no fear, as AOL 4.0i has a powerful spellchecker built into its email function.

Your free AOL 4.0i trial gives you one month's free membership – 100-hours online time; five free email addresses; free technical support; 10Mb of free Web space; plus local call access and speeds of up to 56kbps nationwide.

There's never been a better time to get online. So try it out now with your FREE 100-hour AOL trial.



Service Provider:	AOL
Free time:	100 hours
Modem speeds:	Up to 56k
Tech support:	0800 376 5432
Sales Enquiries:	0800 279 1234
Web Site:	http://www.aol.co.uk
Monthly rate:	£4.95 for 3 hours per month, additional hours £2.35 each. Unlimited use at £9.99 per month
Annual rate:	£119.88
Platform:	Win 3.x, 95, 98, Mac



INTERNET BUSINESS SOLUTIONS, THE BOTTOM LINE

If you want to make an informed decision when it comes to your Internet Business, talk to NetBenefit.

We provide our customers with honest, expert advice for free. And now we'd like to extend this offer to you.

If you're looking to register your domain name, take advantage of e-mail services or are seeking the best web host for your site, read on. We believe there are a few things you should know – so you don't get a bum deal. The things the other advertisements don't reveal.

The naked truth about 'free' domains?
At NetBenefit, one of the longest-established and biggest name registrars, we don't offer free domain registration and as far as we can make out, neither does anyone else, whatever they claim.

If someone's offering you 'free' registration make sure you read the small print and ask the right questions.

Fact one, whenever you register a UK domain name (even with 'free' registrations), you still have to pay a fee (known as the 'NIC' fee) to the official central registry, Nominet.

If Nominet invoices you directly for the registration, the fee is £80 (for two year's registration), but if your registrar invoices you, the fees only cost your registrar £20. If they're then charging you £80 that means they're making £60 on your 'free' domain. Not a bad margin on something that's meant to be free?

At NetBenefit, we've got a visible pricing policy. That means, when you register a domain name with us you only pay the Nominet fees we get charged. We think this is much fairer to our clients.

Aside from the Nominet fees, 'free' registration is still going to save you money isn't it?

Not necessarily. When you register your domain for 'free', you prevent that name from being registered by someone else, invaluable for protecting your company and brand names on the Internet. This said, when it comes to using the domain as an email and web address, you'll find your registrar will actually insist on you paying them for the pleasure.

So if your 'free' domain registrar is not making any money from registering your domain (except possibly on the registry fee), where do you reckon the costs are going to lie? You guessed it – on e-mail and web forwarding services.

Ask your domain name registrar how much they charge for these services. You'll find that all in all this adds up to not-so-free domain registration.

At the moment, we don't offer free domain registration as we know it isn't possible in the strictest sense of the word. We could offer the 'free' packages other registrars offer, but we think our clients prefer our visible pricing, honesty and advice. Plus, of course, our unrivalled levels of customer service.

Cover your rear end
It's also important when selecting a registrar to consider the value they can add. From easy and efficient registration of .co.uk, .com and international domains to our Global Domain Name and Trademark Protection services, you can rely on us to offer unrivalled advice and execution. Take for instance, our I-Watch service, which automatically keeps an eye on your brand names, checking if anyone else is registering them as Domains in other places.

We'll also help you take full advantage of your domain, with our range of flexible, innovative email and hosting solutions. And as we charge a basic fee for the registration of your name to cover our costs, we won't charge you over the odds.

Web hosting – more than the bare essentials
If you're looking for a host to take care of your website make sure they offer the functionality required to run your site at its best and the reliability to keep your site up and running (independent tests serve as a good indicator – NetBenefit scores consistently well – in fact, our uptime and speed performance are amongst the very best in the business).
Our ethos is to give you the right solution to meet your needs. We're completely flexible, whether you require Unix, Windows NT, FrontPage, Cold Fusion, E-Commerce, Stats, CGI Access Control, Shared, Co-located or Managed servers.

And when it comes to costs, watch out for the hosts who make you commit to 12 month contracts. They may look cheap, but where's the get out clause when they don't perform as you expected? At NetBenefit, you'll find we've no minimum commitment. We're so convinced you'll like our services, we don't need to tie you in like other hosts.

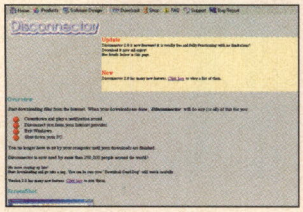
Finally, make sure any Internet partner you choose, offers high standards of service across their business. The ISO 9002 certification serves as a good guide. Something we at NetBenefit are proud to have achieved.

So if you're looking for the best in Internet Business Solutions take the right advice. Turn to a company you can trust.

Call NetBenefit today on 0800 917 0195
or visit our website at **www.netbenefit.com.**

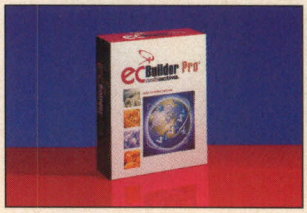
NETBENEFIT
INTERNET BUSINESS SOLUTIONS

CDROM extras



Disconnector 2.0

No more staying up late to download files when phone time is cheap. Disconnector lets you to download files from the Net, and it has finished it disconnects you from your ISP, exits Windows, and shuts-down your PC or plays a sound.

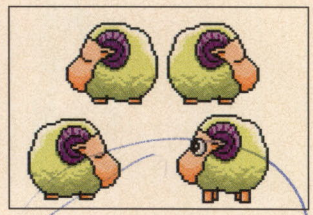


ecBuilder Pro

This demo version of ecBuilder Pro shows how simple it is to set up your own commerce-enabled Web site. The program is template driven and easy to operate. You can include up to 2,000 items in your online store. The full version costs £299 (excl. VAT).

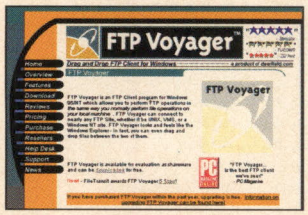
Eudora Light

Eudora Light is small and easy to use. So even if you're using your browser's email client, try Eudora Light to see how efficient an email client can be. If your needs outgrow the free version, there's a Pro version for sale on the Web site.



Esheep

The Esheep are delightful characters that wander, graze and sleep along the bottom of your Windows desktop while you work. Using minimal system resources you can launch a whole bunch of Esheep for your entertainment, but watch out for the alien!



FTP Voyager

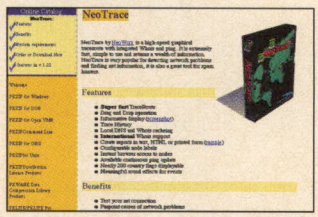
If you spend a lot of time uploading or downloading stuff from the Net, give FTP Voyager a try. This program lets you connect to any FTP site and drag-and-drop files with ease. You can also carry out simultaneous transfers and auto-resume downloads.

Internet Explorer 5

IE now has a simplified interface and customisable toolbars. There's a new search assistant to give more accurate results, and it's now easier to organise Favorites, as well as make them available for offline viewing. Don't go browsing without it.

Neoplanet

Neoplanet is an excellent browser add-on that uses Internet Explorer as it's engine and gives you a variety of 'skins' to choose from so you can customise the look to one that suits you. See our tutorial which starts on page 66.



NeoTrace

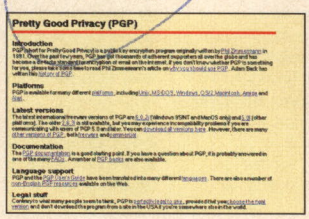
NeoTrace is a high-speed graphical traceroute program – so you can see the route that Internet traffic is taking between you and your destination. It also has an integrated Whois client which lets you find out the owner of a particular domain name.

Palace

Palace is a great graphical chat program that's both easy to use and fun. Run the program, choose your own cartoon representation and then connect to a choice of Palaces. Then you can hang out in the various rooms chatting with other users.

Palace Personal Server

If you like using the Palace, why not set up your own personal server? This program allows you to set up a server for up to eight users, so you and your friends can chat in your very own custom built Palace environment. Just watch those phone bills...

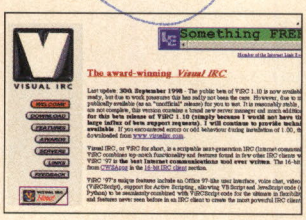


PGP

PGP is a public key encryption program which has become a de-facto standard for encryption of email on the Internet. This program lets you encrypt and decrypt your email with ease, so you know you're safe from prying eyes.

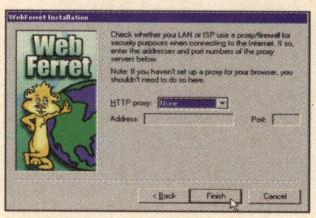
PowWow

PowWow lets you create your own online community. Chat with friends and join in with over 4,000 online PowWow communities. PowWow also includes instant messaging, text and voice chat, multi-user whiteboards, games, and a bulletin board.



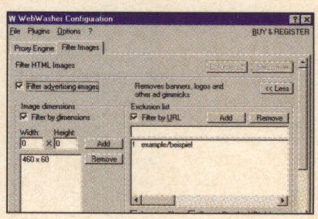
Visual IRC

Visual IRC has an excellent scripting language and customisable interface. It's easy to use, and includes video-conferencing, full logging capabilities, a 'LagScope' for measuring how lagged you are from the server, real-time voice chat, and much more.



Web Ferret

Web Ferret lets you find Web pages by entering a keyword, and clicking 'Find Now.' Your searches can be narrowed by looking keywords or exact phrases. Once you've found what you're after, simply double-click the result to visit the Web page.



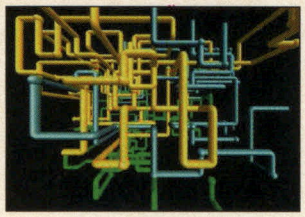
WebWasher

Eliminate annoying advertising banners with WebWasher, which is easy to install and blocks advertising on Web pages as well as filtering pop-up windows. WebWasher also provides statistical information so you can see the benefits you're getting.

WinZip

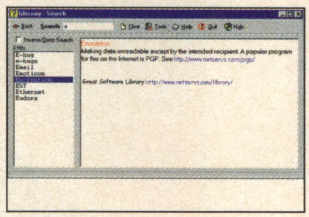
Never try to send big files to your friends without compressing them first – it'll cost you time to upload the files, and it will cost the recipient time and money to download them. Instead, use WinZip, which allows you to compress and decompress files with ease.

Our archive of software that you shouldn't be without



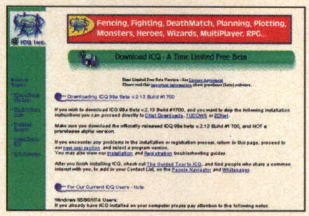
GIF Construction Set

GIF Construction Set lets you construct animated GIF files and edit the control blocks inside the GIF files. Features include palette optimising, AVI to GIF conversion, text banners, neon back-lit and soft shadow text effects, and more.



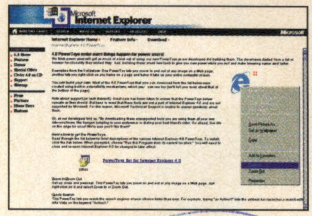
Glossary

Ever wondered what that bizarre acronym stands for? Try Glossary, which pops up with a single click. Just type in the thing you want to find and it displays the definition. It's that simple, and no Internet connection is required to use it.



ICQ

ICQ is an excellent instant messaging tool. Once you've added people to your list of contacts you can see when they're online and send messages back and forth, open a real-time private chat room, exchange files and much more.

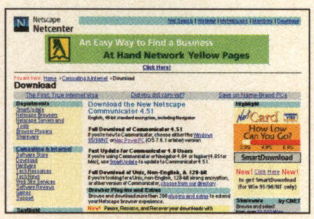


IE PowerToys

PowerToys lets you add a load of new features to IE. Once installed, you can zoom in and out of Web pages, use your favourite search engines straight from the URL menu bar, toggle images on and off, and easily carry out other time-saving tricks.

Net Lightning

Net Lightning helps to speed up your Net connection by tweaking your PC's settings and changing the Hosts file to add IP addresses to your network so your browser doesn't have to ask the DNS servers for information about the URL you are trying to retrieve.



Netscape Communicator 4.51

Here's the very latest version of Netscape's excellent Communicator suite of Internet utilities. It includes a Web browser, an email and newsgroup reader, and a package for building your home page (Composer).

Net Vampire 3.01

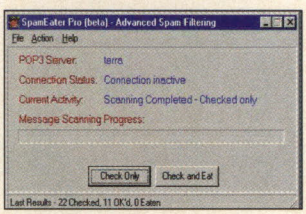
Net Vampire an easy-to-use download manager. You can drag and drop links to schedule them for immediate or later download and the program will restart broken connections automatically and continue where it left off until it receives the whole file.

Opera 3.60

Opera is much smaller and faster than Netscape or Explorer and runs well on older systems, such as a 386SX with 8Mb RAM, that can't cope with the big browsers. If you're fed up with resource-hungry browsers, Opera is for you.

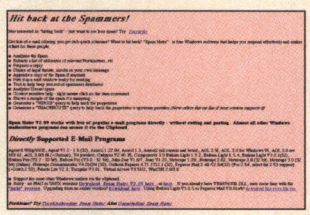
Sonique

Sonique is an audio player with a great looking interface. It comes equipped with a fully featured playlist editor, 20-band graphic equaliser, and standard CD-Player-like controls. Sonique also supports a large number of audio file formats.



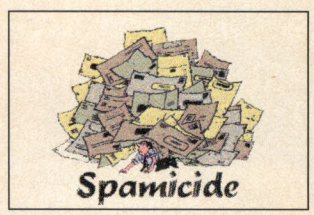
SpamEater

SpamEater can connect with your ISP's mail server, and check each message before downloading it with your normal email program. It then looks at the information in the email headers and marks out any possible spam for deletion.



Spam Hater

Spam Hater helps you fight back against junk email. It analyses the spam, extracts a list of addresses of relevant postmasters, and prepares a reply for you. These replies include a choice of legal threats, insults or your own custom message.



Spamicide

Spamicide is for people who just want to filter out the junk and get on with their day. It moves the spam to a Trash folder and lets your ordinary email program fetch real mail. It can start up and trigger most popular email programs automatically.

100%
ADVICE

You already understand the need to protect your interests by buying the right domain names...

...but finding out just what the 'right' domain names are can be a tricky business. Whatever the name you need to protect and wherever in the global marketplace you need to protect it, NetBenefit can give you independent, friendly advice.

With clients such as Harrods, Gillette, the FT and Virgin, our long-standing reputation for efficient expertise is second to none. To find out more call 0800 917 0195.

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FIX IT YOURSELF!

It takes time and money to call your ISP's tech support line. So learn to understand and solve your own Internet problems and you'll be richer and happier. STEVE PATIENT explains all

Connecting to the Internet – once you have a suitable computer and know which ISP you'll be using – is no more difficult in principle than setting up a TV. And you don't have to get into the attic. It just seems complicated because you don't do it often.

However, though a TV encapsulates all the tricky technology you can still end up pointing your aerial at the wrong transmitter, or end up with BBC2 on channel six.

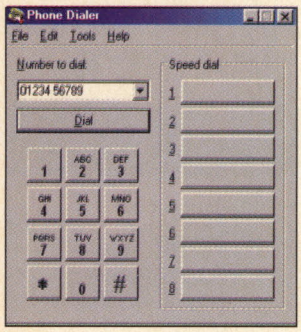
Similarly, an Internet connection can go wrong for reasons ranging from confusion, through a less than optimal set-up, and on to some kind of hardware problem.

The trick to solving operational problems with any piece of technology is to understand the steps involved, run through them in a logical order and check that each one has been carried out correctly before moving on to the next. So let's get started.

Behind the scenes

All the difficult software and hardware aspects of connecting to and using the Net have been sorted out for you in advance. All you have to do is configure it correctly. To understand the process it helps to run through what happens when Windows connects to an ISP using a dial-up connection. With a little understanding you can sort out problems with more confidence.

A Net connection is a multi-level process. At the lowest level you need a working phone line. If your phone line is faulty nothing else works. Your phone line normally only carries tones (sounds), so the digital data used by the Net has to be converted to and from tones to travel over the phone line – which is what your modem does. Modems know how to establish a connection to another modem and how to modulate and demodulate (hence mo-dem) digital data as a sound wave. That's basically all they know.



You can check your modem is working correctly with the Dialer (in Accessories). Arrange to call a friend's phone if you don't have a second line

Dial-Up Networking

The Net is just another digital network, albeit a big one. To connect to any network you need a network adaptor. Dial-Up Networking (DUN) is more properly called Dial Up Adaptor (but this doesn't sound sufficiently active for Microsoft marketing folk). DUN makes Windows think your modem is a network adaptor. It also includes the Dialer, which uses your modem to call the number where your modem can find your ISP's modems.

So, DUN tells your modem to dial another modem and makes Windows think it's a network adaptor. However, to move data over a network you have to have the right network protocol available.

For the Net, you need TCP/IP, which stands for Transport Control Protocol/Internet Protocol. Telling Windows to use TCP/IP with the Dial Up Adaptor is called 'binding.'

OK, we now have the hardware and software set up at your end to enable you to connect to the Internet. But to get to the Net you need to go through an ISP. Like other network protocols TCP/IP is designed for permanently connected computers. You need to talk to an ISP before you can connect through it to the Internet.

Putting it all together

Stay with it now, you're nearly there. The relationship between an ISP and a computer dialling into it is called a client/server relationship. Your PC is the client and the ISP is the server. You have to connect to the server and negotiate a connection. This involves proving you have permission to access the server – which is where your ID and password come in – and have the means.

The means is another protocol which carries TCP/IP – the Internet protocol – over the modem link so it can reach the real Internet. This is called PPP (Point to Point Protocol). PPP is only used to establish and maintain the server/client connection. It's built in so you never see it.

An older system called SLIP (Serial Line Internet Protocol) is also included with Windows as an optional extra on the CD-ROM, but it's less efficient and rarely used with ISPs now, so we'll ignore it here.

We now have the whole connection sequence. DUN uses your modem to dial the ISP's modem. It establishes a physical modem connection. This is used to set up a PPP link which in turn is used to transparently carry the Net's TCP/IP protocol. The end result is to make your computer a temporary part of the Net.

OK, but all this has to be configured correctly in order for the initial connection to your ISP to work and then for your software to locate and talk to other computers on the Net.

What Windows needs to know

The first thing you need is the phone number of your ISP's modem. In practice, there may be more than one suitable number. See 'Get the highest connection speed' (right).

The phone number gets you to the ISP's modem. From there you'll be routed automatically to the authentication server, which checks your ID and password.

But to get beyond the authentication server you need to know the names of the Domain Name Servers, usually shortened to DNS. All Net computers have a real name and some also have a pretend name.

The real name consists of four numbers separated by dots, called a dotted quad, for example, 194.153.1.98. The least important part of the address is at the right, 98 in this case.

A pretend name might look like, www.steve.co.uk where the address, just to make things confusing, is written with the least important part at the left, the www. Whenever you type in a Net address you're technically referring to a computer (though it can get more complicated).

DNS translates the pretend names familiar to humans into the dotted quads used by the Net.

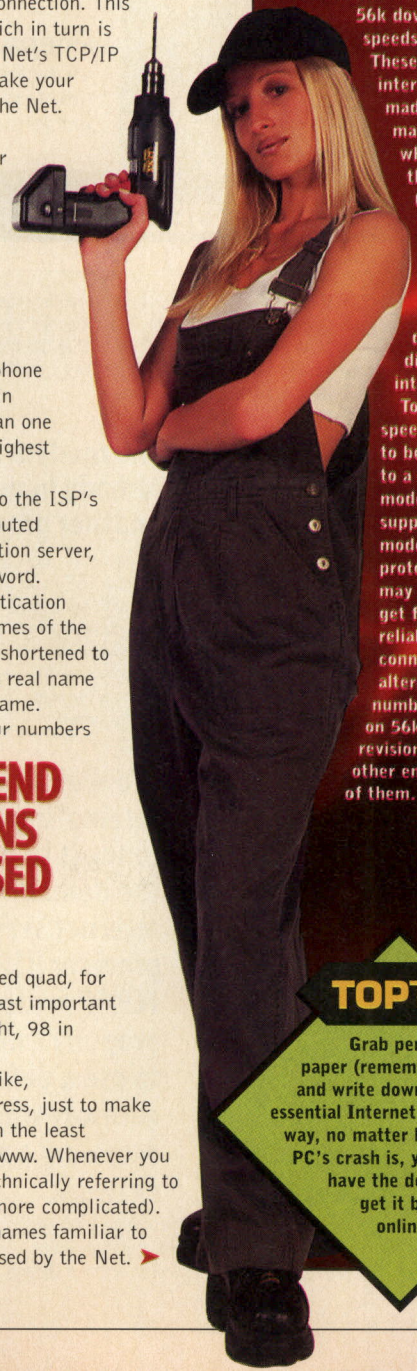
DNS TRANSLATES THE PRETEND NAMES FAMILIAR TO HUMANS INTO THE DOTTED QUADS USED BY THE INTERNET

GET THE HIGHEST CONNECTION SPEED

BECAUSE SPEED IS GOOD...

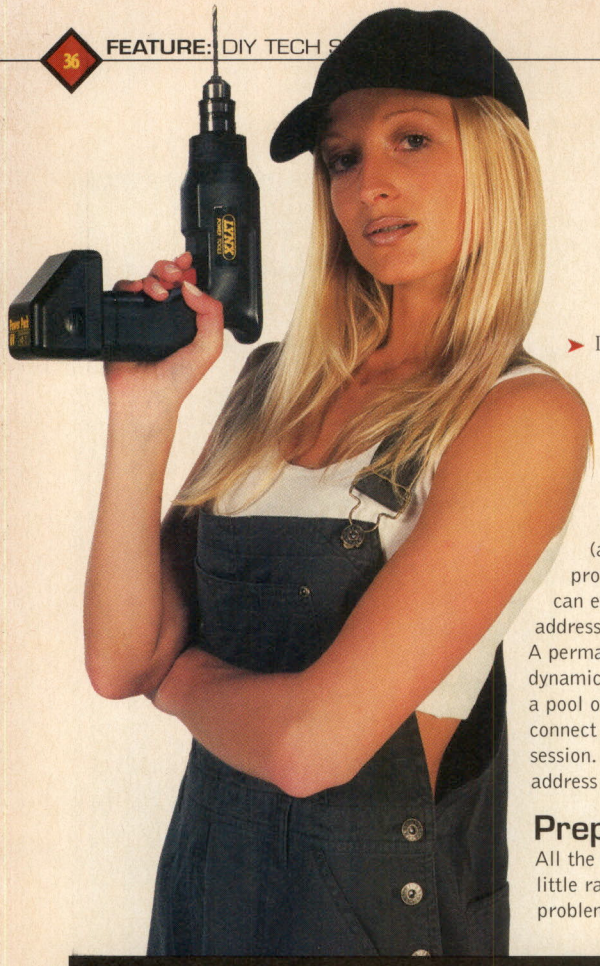
ALMOST all ISPs provide a number with national coverage you can call at local phone rates. In practice, most ISPs provide several numbers. Sometimes these are to support different 56k protocols; one for K56Flex, one for V.90, one for ISDN and so on.

Such numbers connect to specific modem banks. Well, not quite. All 56k calls are connected directly to a digital telephone interface at the ISP's end, which is what enables them to provide 56k download speeds. These digital interfaces are made by various manufacturers who provide the 56k code. Often, an ISP will provide alternative numbers which may connect to different digital interfaces. To get top speed you need to be connected to a digital modem bank supporting your modem's 56k protocol but you may also find you get faster or more reliable connections on an alternative number depending on 56k code revisions at the other end. Try all of them.



TOPTIP

Grab pen and paper (remember those?) and write down all of your essential Internet settings. That way, no matter how bad your PC's crash is, you'll always have the details to get it back online.



START OFF BY WRITING DOWN ALL THE RELEVANT INFORMATION FOR FUTURE REFERENCE

It also handles simple dotted quad addresses. Without the correct DNS numbers your software can't find anything at all on the Net.

There's one more important number: your own address on the Net, called your IP address (another dotted quad). Your ISP provides this in one of two ways. You can either have a permanent IP address or a dynamic address. A permanent IP is yours alone, while a dynamic address is allocated to you from a pool of IP addresses each time you connect and so varies from session to session. If you have a permanent IP address your DUN needs to know it.

Prepare for problems

All the explanation so far may seem a little rarefied but solving connection problems effectively can't be done on a painting-by-numbers basis. Understanding the process makes it easier – as does preparation. So start off by writing down all the relevant information about your Net connection for future reference. Remember, knowledge is power.

You want to know your ISP's dial-up number, your ID and password, the DNS numbers if required and your IP address if required. As you'll need them to configure your Net software, note down your email address, the SMTP server (to send email), the POP server, if different (to pick up your email) and your news server. If the ISP has a user configurable proxy server get its address as well. You want this information for every ISP you use.

Now you should note down information about your own machine. You want your modem name and type (internal or external), its connection speeds and methods (V.90, K56Flex and so on), which COM port it's on, what IRQ it uses and the firmware version number. You can get this from Control Panel/Modem/Diagnostics/More Info. It's the information following ati4.

If you don't have a disk with an INF file (also

10 COMMON PROBLEMS PROBED

WHAT'S THE PROBLEM?

SHOULD any connection problem suddenly become apparent on a previously working system – and you know you haven't changed anything – the first thing to try is closing down the computer, turning the modem off and on if it's external, and rebooting. It's surprising how often this works.

1. When connecting, the ISP won't accept your ID or password

Check the spelling. Remember IDs and passwords are case-sensitive. If possible try another ISP to see if you can connect. If you can, make a new connector in Dial-Up Networking for the ISP (give it a different name). If this doesn't work you have no choice but to contact the ISP.

2. Dial-Up Networking won't remember my password between sessions

In order to save passwords you must be using a login name and password for Windows itself. Set one up in Control Panel using the Passwords icon.

3. Windows 95 says it can't establish a compatible set of network protocols

Check Networks in Control Panel. On a standalone PC you should only have TCP/IP installed and the only binding on Dial-Up Adaptor should be TCP/IP. In the Properties for the ISP's connector in Dial-Up Networking only the protocol box with TCP/IP should be ticked.

4. The modem is already in use by another program

If you get such a message when you try to dial your ISP make sure you don't have something such as HyperTerminal running. Bring up Task Manager and see if Operator or other obviously comms-related software is running and kill it. Then try again. As a last resort, reboot the system.

5. The Web site you are attempting to connect to is outside the domain of your Internet service provider (ISP), or the TCP/IP protocol is not properly configured to use a default gateway when accessing a remote network

These messages usually mean some kind of proxy setting is wrong or you need to define a Default Gateway address in the TCP/IP settings of your ISP connection in Dial-Up Networking.

6. DNS errors/Host Not Found

There are three common reasons for this type of error. The first is you aren't actually connected to the Net (it happens). The second is caused by the program trying to use the wrong Winsock file (which can happen if you use old AOL or CompuServe installation disks, for example). Suspect this if you've recently installed more ISP or Internet software. The third is you've entered the wrong DNS numbers into the ISP's TCP/IP properties. Check them. A possible fourth reason is because either your ISP's DNS machines have failed or part of the Internet's basic DNS system has become corrupted. It's happened several times. In this case check with a friend to see if they're experiencing DNS problems.

7. Error 404 or Site Not Found message

If you can find other sites try to Ping the missing one. If Ping doesn't work the site is probably down. If Ping says something like, 'Bad IP address' and other sites don't work either then it's probably incorrect DNS entries in your DUN settings for the ISP.

8. Dial-Up Connection was not reliable.

Check server types

If you get this you probably have 'Log on to network' ticked in the connection Properties. You should normally untick this anyway as it results in faster connections.

9. During a long session online Windows 95 slows down or reports it's running out of memory

The original version of Windows 95 had a lot of bugs, and this is one of them. To fix it you need the Windows 95 kernel upgrade patch which you can download from Microsoft's site. While you're there, get the update to Dial-Up Networking as well.

10. 'Disconnected by server' or similar messages

This is fairly unusual these days but if you get this message regularly it usually means that your system can't cope with the data rate you've set it for. Go into Properties for the connection, click on 'Configure' in the 'Connect using' section. In the next dialogue box change the Maximum speed setting to a lower one and try again. If you still get it at 57600 try turning off compression in 'Advanced' under the Connection tab. If you keep getting it try another modem – yours sounds unhealthy.

Ever get the feeling your ISP hasn't got room for you?

Sound familiar? First, you can't get a connection. Or it's so slow you cringe at the thought of your next phone bill. Then there's support – thousands of new users, masses of calls to the help-line, total gridlock (that's £5 for a ten minute call with many 'free' Internet providers).

It's time you called Direct Connection. We always upgrade our network capacity ahead of demand so you're assured a high quality connection. In fact, using our nationwide access number you may never hear an engaged tone again. And our support was recently awarded top honours by Practical Internet .

For a better connection, call Direct Connection now on 0800 072 0000 or visit our website.

- Simple on-line registration with free installation CD
- Flexible pricing from just £4.70 (inc. VAT); no set-up charges
- Unlimited email addresses
- 20MB of Webspace
- Speeds up to 128Kbps ISDN or 56Kbps (V.90)
- BT Home Highway or Business Highway compatible
- Internet access at local call rates
- Global roaming; Internet Explorer browser
- 7 day-a-week technical support at local call rates
- Corporate services available

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Call now on 0800 072 0000

www.dircon.net

Direct Connection

Updating software

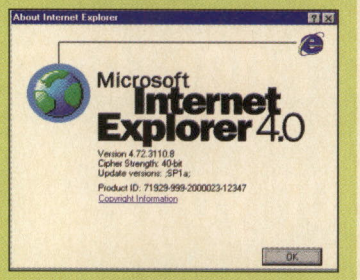
ALL software is buggy, but some bugs are more disruptive than others. IE 4 and its components are notoriously buggy, which is why you should upgrade to IE 4 SP1 (Service Pack 1), or IE 5, or to the latest version 4.5 of Navigator.

If you're running Windows 95 then you should upgrade your DUN to version 1.3. Those with Home Highway who want to use an internal ISDN card have to do this anyway. The self-installing file you want is called Msdun13.exe and is available from Microsoft's site and others.

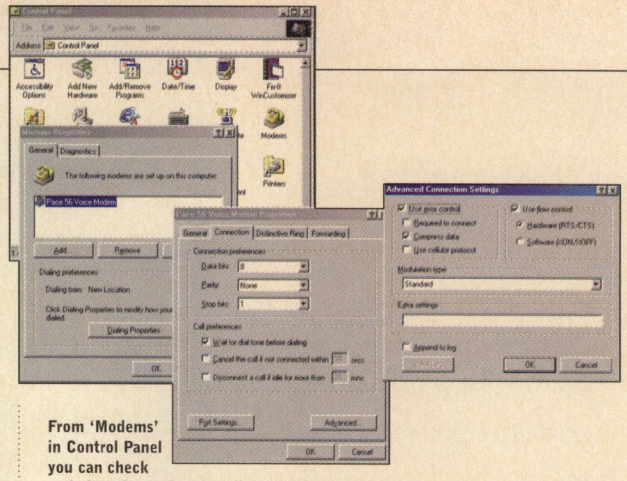
It upgrades DUN, TCP/IP and optionally Winsock (which is the standard software interface most Net programs talk to on your PC). This can often improve connection speed and cut the number of dropped lines you get. It also fixes a memory leak which slowly eats RAM while you're online.

As mentioned elsewhere, check your modem manufacturer's site for modem firmware updates, especially for 56k modems. A lot of the early firmware was buggy and sub-optimal. Updating it will often give you faster and more reliable connections.

There's no need to install every software upgrade offered for every Net program you run, but keep an eye on them – sometimes you only discover what's causing a problem when a fix is released.



You can check the version number of most software from the 'About' box under Help, but there's no simple way to check your DUN version number, so upgrade it anyway

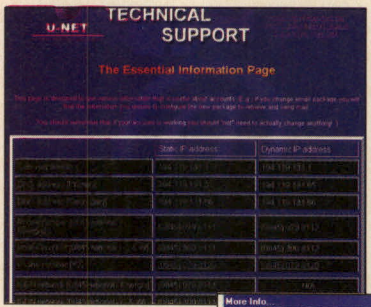


From 'Modems' in Control Panel you can check and alter the modem installation, remove and install modems and make it work differently

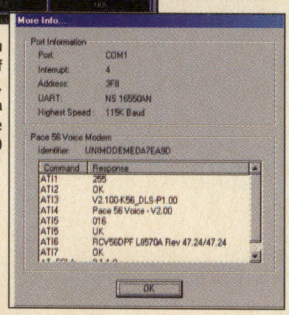
known erroneously as a modem driver disk) for your modem then get the correct INF file or driver right now from the manufacturer's Web site. OK, you're now reasonably well prepared and can move on to troubleshooting broken connections.

Checking everything

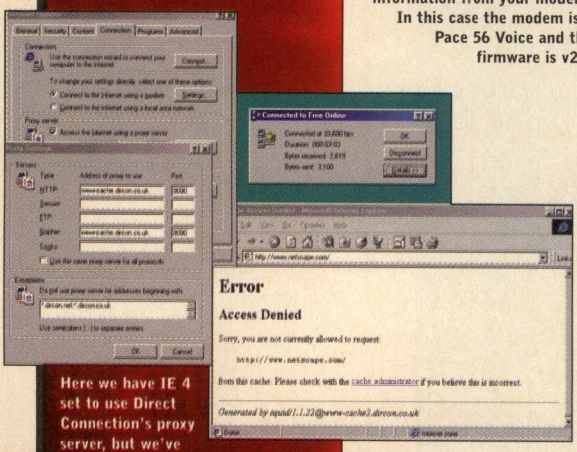
Obviously, it's impossible to address every problem with every ISP, which is why we're discussing the principles behind Net connection. In practice, of course, almost every ISP provides a CD-ROM to set up a connection for you automatically.



All good ISPs include at least one page on their home site covering all the essential configuration information you're ever likely to need. U-Net's is great. Save it or print it out for reference



From Modem Diagnostics you can get a surprising amount of information from your modem. In this case the modem is a Pace 56 Voice and the firmware is v2.0



Here we have IE 4 set to use Direct Connection's proxy server, but we've dialled in with Free-Online. Dircon's proxy is denying us access so no Web addresses work, but at least we get a meaningful message explaining why

Most problems occur because your initial hardware and software set-up is wrong, because the automatic set-up fails or because you (or Windows) later alters something crucial.

The other cause of problems is when one ISP's set-up routine damages the set-up of an existing ISP. This is increasingly common as more people take advantage of trials or install free ISPs – while too many ISPs continue to assume only their connection will be used on your computer.

What you're going to do now is familiarise yourself with Windows and get to know where each of the items of connection information is located so you can check them out. We'll start with the modem.

In Control Panel (from Start/Settings) you'll see Modems. Open this and you should see your modem correctly identified. From the Properties button you can change the way the selected modem is used and check it's set up correctly.

It's worth noting down all the settings when it is working so you can check them if it stops working. From here you can also tell your modem to dial without a dial tone and, from Diagnostics (click 'More info'), check the modem's responses to AT commands.

The most useful item is the response to ati4, which gives you the modem's firmware code version number (though it can be ati3). You can check this at the manufacturer's Web site to see whether the modem is running the latest code and whether it's been upgraded to V90 operation.

Checking Networking

Information needed to connect to the Net is stored in two places. The basic services are in Networks (in

WEB PROXY SERVERS EXPLAINED

DO IT BY PROXY...

PROXY servers work by saving any Web page requested by a user. If this page is required by another user within a predetermined period of time the saved page is handed out rather than fetched from the original site

ISPs can use one of two types of proxy server, or none at all. Transparent proxy servers are maintained by the ISP, used automatically by all the ISP's subscribers and require no setting up in your Web browser software.

To use an optional proxy server you have to enter it into the settings for your Web browser, though some installation routines do this by default.

FURTHER TROUBLESHOOTING

AS A LAST RESORT, TRY THESE TIPS

TO check whether or not an ISP's login is working you can use HyperTerminal, in Accessories, but first you have to create a special direct connection to your modem – which is undocumented.

Run HyperTerminal. In the Connection Description dialogue box, enter the name Terminal, choose any icon and click 'OK.' On the Connect Screen, instead of entering a phone number click the down arrow in 'Connect Using' and choose 'Direct to Com1' or whatever COM port your modem is on. Save the session.

Now you can use HyperTerminal to issue AT commands as well as to make a manual modem connection, though not access the Net. To see your commands you may have to turn on local echo – see the screenshot.

Type in ATZ. Your modem should respond with OK. Now type in atdt08451444222 where the number is your ISP's dial-up number. You should get a message from the server and some kind of login. If it accepts your ID and password the screen will fill with rubbish as it tries to set up PPP. You now know you can connect. Disconnect from the Call menu.

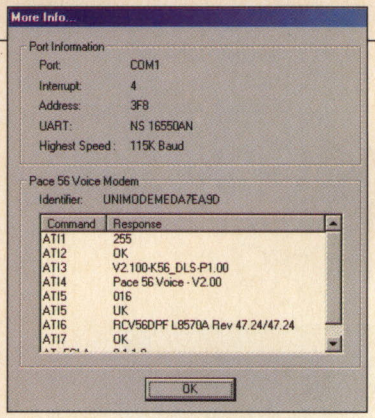
If you can connect but can't reach other sites use Ping to check the ISP's DNS servers. Start a DOS session and type ping followed by the DNS address you want to check, like so: ping 212.56.108.16.

If it replies you can use Ping to check other sites to see if they're up. If you can Ping the DNS you should be able to use Ping with ordinary human readable names for Net sites instead of dotted quads.

However, the single biggest software problem appears to be Internet Explorer. Multiple installations of IE 4 often cause registry problems resulting in bizarre behaviour of one or more IE 4 components.

In general, you're better off

TRY SETTING UP AN INTERNET NET CONNECTION MANUALLY IN DUN



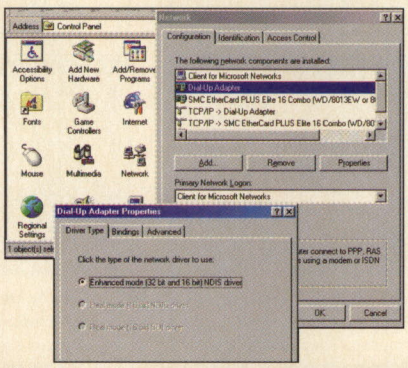
From 'Modem Diagnostics' you can check your modem is talking to the PC and discover which version of the firmware code is installed

Control Panel) as they should be since the Net is a network, but the ISP-specific connection information should in the connection icon for the ISP in Dial-Up Networking.

So, familiarise yourself with Networks. In it you'll find four basic components: Clients, Adaptors, Protocols and Services. Of these you only need the first three on a standalone PC. The Client is Clients for Microsoft Networks, the Adaptor is Dial-Up Adaptor and the Protocol is Microsoft's TCP/IP. You use the Add or Remove buttons to install and uninstall these, and Properties to check them.

The only thing you really need to check in Networks is the Dial-Up Adaptor's binding, which should be to TCP/IP. You need no other protocols and, if you do have them, they just slow down your connection – so remove them.

Specifically, you shouldn't have any TCP/IP configuration in Networks unless you actually have a local network. Even then, it will only be the TCP/IP bound to the local network adaptor which will have TCP/IP configuration information. This arrangement is essential if you want to install multiple ISPs.

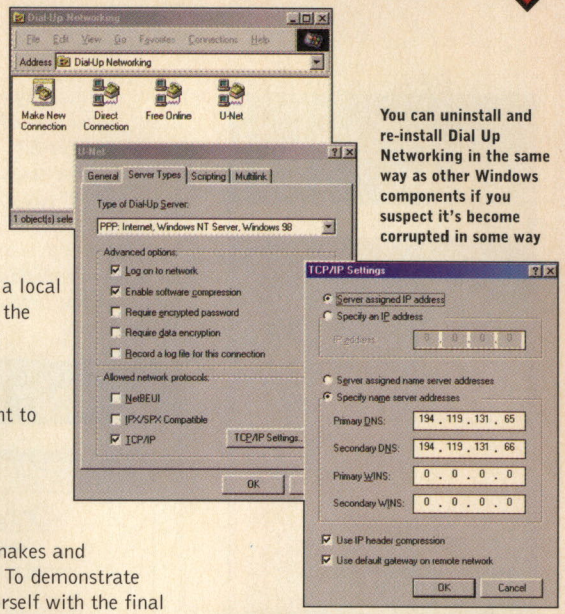


Networks, in Control Panel, is where you'll find all the networking components installed on your PC, and where you can add, remove and edit them. Install but don't configure TCP/IP for the Dial-Up Adaptor

Exercise for good students

OK, you now know how Windows makes and maintains a connection to the Net. To demonstrate your mastery – and familiarise yourself with the final location of important Net configuration information – you're going to manually set up an Internet connection in DUN. Oh yes you are.

We'll use one of the free ISPs, Free Online. It doesn't matter if you already have this one installed, you can duplicate connectors in DUN. On any computer you like go to http://www.free-online.co.uk and sign up. When you get to the screen asking if you have the CD or want to set up your PC manually, choose manual set-up. You'll get a page of set-up information. Note this down or print it out. You're now going to use the Internet Setup Wizard to create a new connection after



You can uninstall and re-install Dial Up Networking in the same way as other Windows components if you suspect it's become corrupted in some way

RE-INSTALLING DUN

BEEN THERE, DUN THAT...

AS with any other program or component it's possible for Dial-Up Networking to get its knickers in a twist, though it's unusual. If DUN appears to have stopped working, or is working in a strange or unreliable manner, you can uninstall it and re-install it from Add/Remove Programs in Control Panel.

Open Add/Remove Programs and click the 'Windows Setup' tab. Select 'Communications' and click on 'Details.' Now untick Dial-Up Networking and click 'OK.'

Windows will remove DUN and restart. Go to the same tab again and tick the DUN box to re-install it. You'll need your Windows CD-ROM if you don't have a machine with the Windows installation CAB files installed on the hard drive.

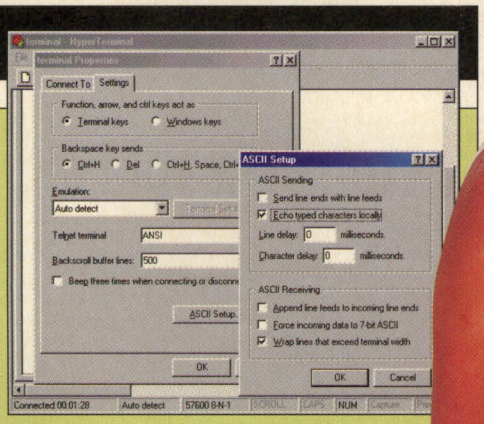
When DUN is re-installed it will pick up your pre-existing connections automatically. However, for a completely clean rebuild you should remove these before you start, as well, and reconfigure or re-install them from scratch.

TIPS

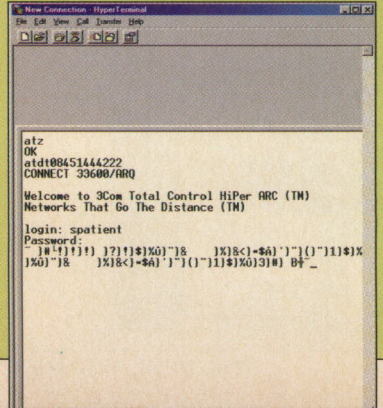
uninstalling IE 4 before installing a new ISP which wants to re-install IE 4. This isn't possible in Win98, of course. In my experience, if IE 4 breaks in Win98 you can either install and use Netscape Navigator, which will work perfectly well, or reformat the hard drive and re-install all of Win98 along with everything else. A most unsatisfactory state of affairs.

A recent alternative worth trying before giving up is to install IE 5, which in some cases appears able to cope with broken IE Registry entries. Before doing it, run the free Microsoft utility, Regclean, available from its site at http://www.microsoft.com/NTServer/nts/exec/vendors/freeshare/ Maintnce.asp.

You'll also find Registry cleaners in packages such as Mijenix Fix-It 99. Avoid shareware Registry cleaners – it's a tricky program to get right and you don't want to end up with more problems.



To make HyperTerminal echo your command on the terminal screen select 'Properties' from the File menu. Click Settings, then ASCII Setup and tick 'Echo typed characters locally'



Here, Ping is used to check whether or not the DNS machines at Free Online are up and running – they are

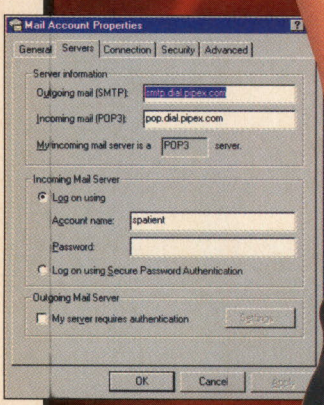
CONFIGURING EMAIL

SORT YOUR MAIL

SETTING up an email program manually frequently seems to cause problems, partly because ISPs can implement it in different ways. Basically, you should only need to know your email address, the SMTP (Simple Mail Transport Protocol) server address and the POP (Post Office Protocol) server address to get it to work. Sometimes, one mail server does double duty, so you will get a single email server address. That's fine, just enter it into both sections. Problems tend to arise because some ISPs and some programs require what looks like an email address to be entered instead of a POP server.

In fact, it's just a different way of presenting the same information. Your POP account name is your POP server name preceded by your ID and an @ symbol. So with an ID of spatient and a POP server called pop.dial.pipex.com your POP account is spatient@pop.dial.pipex.com even though the email address is spatient@dial.pipex.com.

A similar looking but unrelated oddity crops up in the connection information for some ISPs. With these you have to enter your whole email address as your ID. For example, if your LineOne ID is spatient you have to enter your ID as spatient@lineone.com. This is because some ISPs share modem banks. Without the domain name after the ID the servers wouldn't know which service to connect you to.



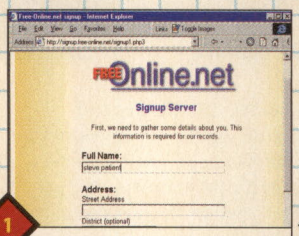
It's important when setting up an email client program to provide information in the format it wants. Eudora and Outlook Express, for example, want the same information but entered in different ways

which you'll configure it from Properties. If in any doubt follow the walkthrough below or turn to page 68 for more details.

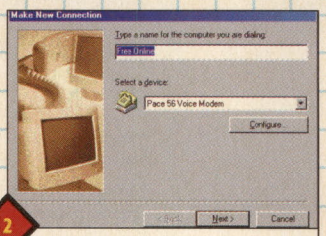
Once you've set up a working ISP account from scratch you'll feel more confident about tackling problems with existing accounts. In fact, if you try everything in this article you'll end up knowing more about troubleshooting a Net connection than most first line support people on the average ISP help desk.

PRINT OUT THE ONLINE SUPPORT PAGES FOR WHEN YOU CAN'T CONNECT

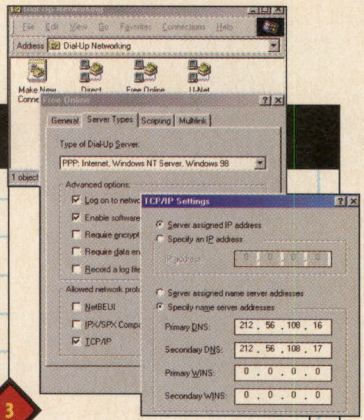
SETTING UP FREE ONLINE MANUALLY



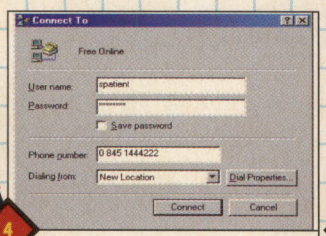
1 The first step is to sign up to Free Online, which you do online (not necessarily on your own PC – any one will do) in order to get the manual connection details



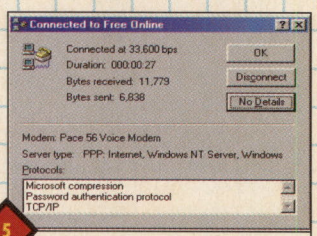
2 Note down the details, double-click 'Make New Connection' in Dial-Up Networking and enter a name and number



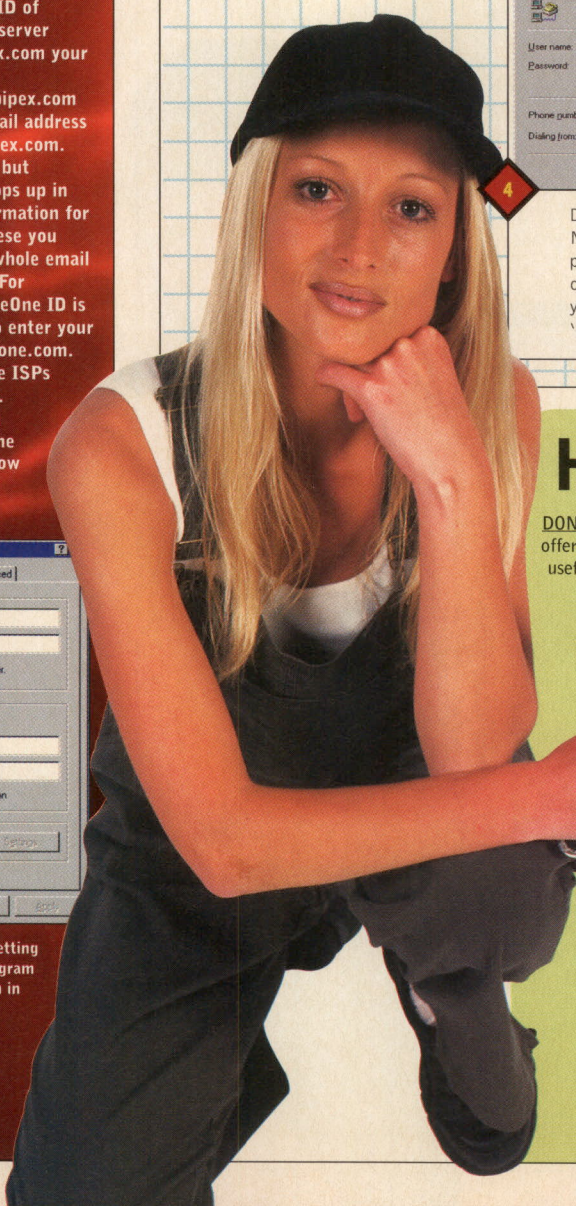
3 Right-click the connector in DUN and select 'Properties.' Click 'Server Types' and then on TCP/IP settings



4 Don't forget to untick the NetBEUI and IPX/SPX protocols. Now you can double-click on it as normal, enter your ID and password and click 'Connect'



5 Free Online supports V.90, so as this modem has K56Flex firmware installed for another ISP we only get 33,600bps connection – but it works perfectly. Now you do it



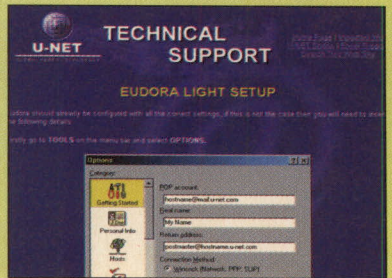
Helping yourself

DON'T wait until things go wrong before checking out your ISP's support offerings. Familiarise yourself with online support and print out or save any useful looking material locally for the day you can't connect.

Check out your modem manufacturer's Web site, search the Net for known problems with your specific kit and software, make sure you have the latest releases and software or firmware patches for any Net hardware and software you use and avoid running beta software – it's asking for trouble.

Keep alternative Net software on hand. It isn't unusual to find IE 4 and its components broken in some way while third party email, newsgroup and browser software works perfectly well. In fact, Windows is often more stable with third party Net software precisely because it isn't so heavily integrated into the Windows operating system.

Don't limit yourself to your own ISP's support pages. For example, the online support available at U-Net covers a huge range of Net software and reflects the high quality of its service



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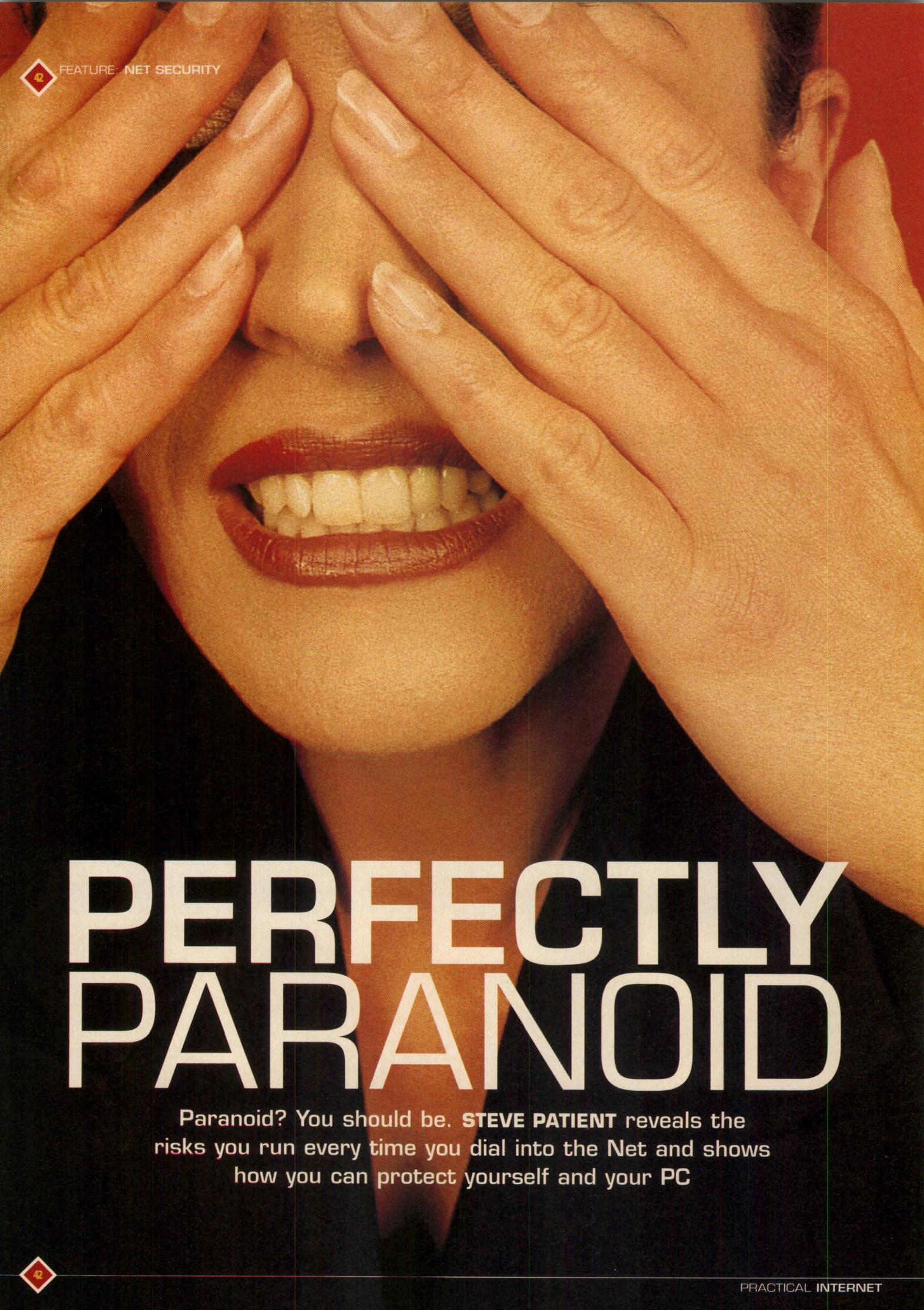
* source Nominet UK figures for March & April 1999



PERFECTLY PARANOID

Paranoid? You should be. **STEVE PATIENT** reveals the risks you run every time you dial into the Net and shows how you can protect yourself and your PC

Let's start with the good news – no one can kill you over a Net connection. From this point of view the Net is pretty secure. Whatever happens – metal fatigue in your swivel chair excepted – you can always walk away from your computer.

The bad news is the ever-increasing range of attacks and accidents to which your system is vulnerable. You lay yourself open to them while doing everything from slipping a foreign disk into a floppy drive to downloading files from the Net – though many people would argue the biggest risk to your computing peace of mind is Windows.

This isn't just cynicism. Not everything bad happening to your PC is the result of a sad young nerd's misanthropic mind. Software you've paid good money for is perfectly capable of trashing your system.

As Microsoft admitted a few months ago, Windows 95 and 98 – the fifth and sixth major revisions of the operating system – will only run for 49.7 days before a bug crashes it anyway.

This would be funny if it weren't for the fact that a variety of other bugs ensure no one ever manages to keep Windows running continuously for longer than a few days. Still, you want to hear about more exciting threats to your peace of mind than your own software.

-=Leave Us Alone=-

For some STRANGE reason (heh), AntiOnline seems to be the target of many hackers. We do our best to keep our network secure, and to keep these hackers at bay. We thought that we'd give you, our readers, a little glimpse into our network to take a peak at the different types of possible hack attempts that we see on a daily basis. The information below is updated live via one of our network monitoring stations. You can click on the type of attacks to get a complete definition.

Type Of Attack:	Address Of Attacker:
HTTP PHF Vulnerability Check	zoom0-036.telepath.com
HTTP Test-CGI Attack	zoom0-036.telepath.com
HTTP PHF Vulnerability Check	as1-p231.tfs.net
HTTP PHF Vulnerability Check	as1-p231.tfs.net
HTTP Test-CGI Attack	as1-p231.tfs.net

In the real world hackers target interesting targets such as noc.antionline.com, which keeps a running tally of attacks. Interesting and educational

Protect and survive

People are notoriously bad when it comes to evaluating risk. The only stuff on your computer of value to you or anyone else is data, so this is what needs protecting.

Yet people who will spend weeks of time, pounds of money and pounds of energy securing files against hackers are the same ones who don't bother to install – let alone use – back-up software. Go figure.

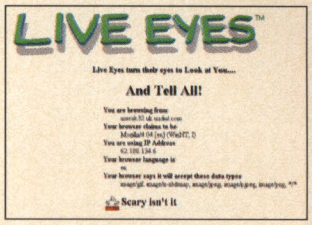
First, let's dispense with the bogey men. Yes, there are hackers out there, but to be an effective hacker requires high levels of skill and knowledge. It isn't easy to do and it is easy to foil. However, check the boxout 'Hacking Dial-Up Users' for more info.

In practice, if someone wants what's on your PC really badly the easiest way for them to get it is to pay a couple of wide boys fifty quid each to sledgehammer down your front door and steal the system box. This approach is faster, easier and more effective than hacking.

No, much more serious are the general, scattergun threats designed to upset anyone who happens to get in their way. In practice, though you expose yourself to a variety of these threats while using the Net they're easy to defend against.

Sickening viruses

Of all threats the most important and prevalent is from viruses, of which there are two kinds – the second courtesy of Microsoft. 'Traditional' viruses attached themselves to programs or insinuated themselves into



Your browser hands out a surprising amount of information about you even without a sneaky JavaScript to help it out

And here's Windows NT's online details page just to prove Liveeyes knows what it's talking about – and yes, it is scary

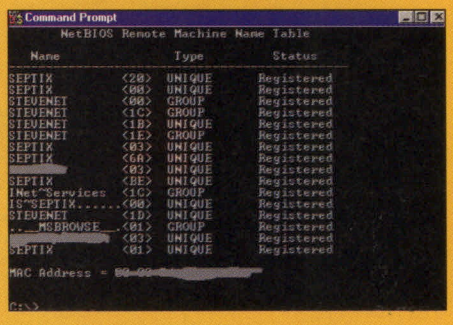
HACKING **DIAL-UP** USERS

WATCH OUT FOR PEOPLE 'SHARING' YOUR PC

WINDOWS 95 and 98 have no security worth the name. Anyone with your IP number can try to access your PC – which means just about anyone. Getting your IP number is hardly rocket science. Everything on the Net has to know it to deliver Web pages, files and whatever to your machine.

However, the way the Net works means something on your PC must be willing to co-operate with the hacker. Servers on the Net are so called because they are designed to hand out information. Generally they're running a variety of server software. This isn't true of the average Win95 or 98 PC, or most Macs.

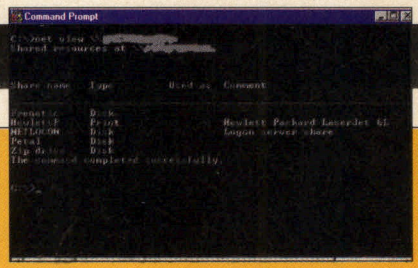
On the other hand, you may be running servers without realising it. Some local proxy servers (aha – that word again) can be vulnerable to outside interference. Anyone who installed FrontPage, for example, gets a Web server added by default (many other Web authoring packages now also do this). The really big risk, though, is File and Print Sharing. On a standalone PC this should never be installed but of course, lots of people now run more than one PC and install it to share files and printers – obviously.



The nbtstat command provides basic information about a system including whether or not it has any shares and the name of logged on users (obscured)

OK, imagine you have sharing turned on. Someone with your IP address now opens a DOS window and types nbstat -A 123.123.123.123 or whatever your IP address is. This will produce a Remote Machine Name Table, probably a little less complex than the one shown. Hackers are looking for a <20> which tells them sharing is enabled. If they spot this the next step is to type net view //123.123.123.123 which will produce a list of shares (shared resources) on your system, though again, probably not as long as the one shown. Those shown are from a local network which doesn't connect to the Net.

If the hacker now tries to access one of these shares they should be asked for a password, but probably won't be because you got bored with typing it in every time you wanted to print a page or copy a file. Always use passwords on shares. Make sure they contain at least one number to make it hard to guess. If they do have access to your shares they can print rude messages on your printer, or more seriously, perhaps edit your autoexec.bat file to contain a line which will invoke the format command and provide the 'y' it needs to for confirmation. Clever huh? But to look really clever they edit their lmhosts.sam file, which is simply a template, and create a real lmhosts file with your IP address, machine name and #PRE setting. Once loaded into nbtstat (nbtstat -R) the information in this file enables them to browse your computer over the Net in Windows using Network Neighbourhood.



Once someone knows shares are accessible on your system another simple command provides their names. It's all a bit too easy really

SOCIAL ENGINEERING

IMAGINE this scenario. Someone rings you up claiming to be from your ISP. They tell you the authentication database at the company's HQ has been hacked using a bug in their server software and a number of accounts have been duplicated – one of them is yours.

The person, who sounds harried, apologetic and more than a little tired, tells you this is just a courtesy call because they've fixed the problem. However, the new entries duplicate existing user accounts with different passwords and they can't tell from their end which password belongs to the legitimate customer. There are two for your user ID on their system (this stuff is called techno-babble).

They then tell you your ID (your username) and ask if your password is 'cuttlefish' (for example). You say no, because it isn't. People want to be helpful which is why some users – despite having been told they'll never be asked for their password over the phone – will simply offer it. "No, my password is smeghead."

At which point a hacker has gained access to your account. If it isn't offered the caller might say, "OK, I've deleted that entry. You need to check the other password on the system hasn't been changed. I can confirm it for you or you can dial in and try it."

Provided the other party doesn't appear interested, and because their own computer might be turned off and in another room, a lot of users will say, "Oh thanks, sure, check it. It should be smeghead." You wouldn't, would you?

Variations on this kind of conversation go on every hour of the day. Hackers call it 'social engineering' because 'lying to people to win their trust' sounds somewhat anti-social. Social engineering works because most people don't really believe they'll be targeted, they don't take security seriously and because, primarily, people are surprisingly co-operative. They want to be your friend.

The rule is never, under any circumstances, divulge information to a third party which gives them the ability to impersonate you. Passwords and PIN numbers only work if no one else knows them. It doesn't matter how convincing the reason given – don't divulge. If, despite this, your Net account is compromised in any way, close it and change ISPs.

Dangerously ActiveX

ACTIVEX components are really OLE renamed – as Microsoft admits. OLE is just a way of sending program components around the place. ActiveX components are binary level programs designed to run on Intel processors and clones under Windows.

In every way they are the same as any other program on your PC with full and unrestricted access to everything. More interestingly, they're actually designed to download and run automatically and transparently as soon as you hit a Web page containing one. Are you scared yet? Pop along to **http://www.halcyon.com/mclain/ActiveX/Exploder**.

Now are you scared? You should be. Microsoft's response to the total lack of security in ActiveX, after first claiming it didn't constitute a risk, was to introduce its trust model.

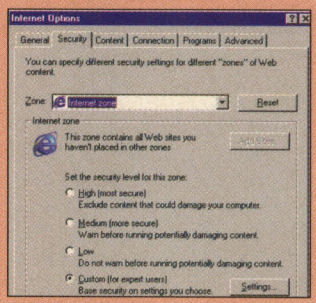
This requires an author to sign an ActiveX component using an encrypted certificate issued by a certifying authority, such as Verisign. Then everyone knows who wrote it and whether or not to trust it.

Eh, no. Anyone can obtain a certificate without divulging their true identity. OK, it's criminal, but then if someone wants to destroy systems they're hardly going to worry about using a stolen credit card number to get a certificate. Some people are even strange enough to want you to know who trashed your system.

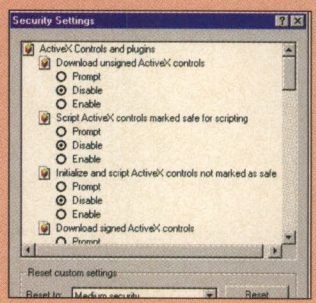
ActiveX isn't like other file downloads. If you download a driver or a software patch, a program or other file it's usually from a company Web site with a reputation to protect. And you get the option to do it or not.

You know what you're downloading. It can't run until you've unpacked and installed it, you can virus-scan it and so on. With ActiveX you have three options. You can disable it completely, you can set your browser security to reject unsigned ActiveX components and prompt before downloading signed ones, or you can automatically accept any signed ActiveX component.

The first is secure. The second is pointless because, as discussed, how do you know you can trust the component when anyone can get a certificate? Choosing the third option ought to render you certifiably insane.



Disable all active content in Web pages along with scripts from IE 4's View/Internet Options. Select the Security tab



Click in Custom and then the Settings button and you can fine tune IE 4 to accept or reject most kinds of content

disk boot sectors. You can only get these by booting your PC from an infected floppy disk (or trying to) or by running an already infected program. Any anti-virus program can defend you against these. MacAfee or FPROT will do just fine. If you aren't running anti-virus software stop reading right now and install some.

More insidious are macro viruses – Microsoft's contribution to computing hell. Microsoft wanted active documents capable of calling on programmatic components such as scripts and applets. Fine on a standalone machine but a nightmare on the Net.

Macro-driven active documents such as .DOC files (the main culprit) can literally do anything to any file or setting on your computer that you can – up to and including formatting your hard drive.

The latest macro virus, Melissa, spreads itself via email (provided you're an Outlook user) so successfully it took down dozens of company email servers through sheer overload – and this is a virus without a payload. Imagine if the author had wanted to get nasty.

There is no complete defence against macro viruses. Even if you turn off macro autorun in Word you aren't secure. The only defence is to use a different word processor and refuse to open any Office file unless you know it came from someone you trust. Better yet, insist on getting documents saved in text or RTF format – anything that doesn't support macros and embedded active components.

Attack of the trojans

Before the Net, trojans were a minor problem. They're simply malicious programs described as something useful or amusing – a disk clean-up utility, perhaps, that deletes all your files. Ho, ho.

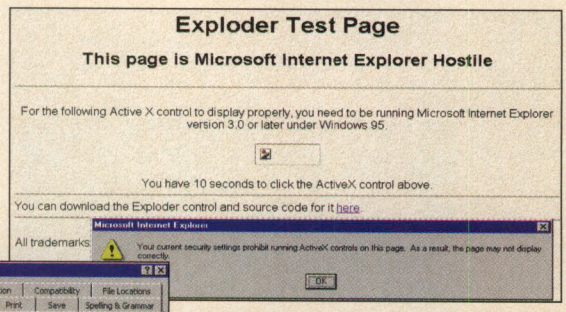
Part of the problem is programs and program updates, bug-fixes and plug-ins designed to auto-install. We all download and run these, but be careful where you do it from. Generally, files downloaded from the software or hardware company's official site will be safe – well at least they won't be deliberately malicious.

But watch out for Microsoft software; its proprietary attitude to its software means it doesn't hesitate to change things on your system that you might not want changed – such as upgrading a program so older versions can't open your files. Oddly, this is known as marketing rather than malicious.

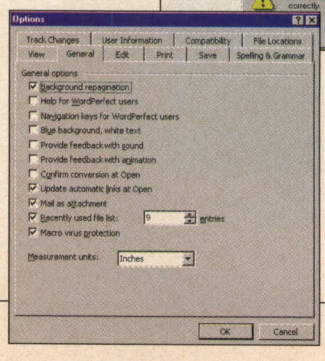
You should also watch out for prank programs. These supposedly amusing software vignettes usually pretend to be doing something weird or unwanted, such as destructively testing your monitor, while actually being harmless.

Well, they may be harmless but the ensuing heart attack won't be. More seriously still, panic attacks brought on by pranks can cause anxious and inexperienced users to behave even less sensibly than normal. A common reaction is to reformat and re-install everything 'just in case.' Not funny. But then the Net often isn't.

A recent example of a trojan which attacks



It's dead simple to write a destructive ActiveX applet for Windows as demonstrated by the Exploder – check it out



Word doesn't allow you to disable macros completely but you can set an option which puts up a dialogue asking whether to run any macros in a document. Do it

TOPTIP

Always use a virus checker to scan anything you download from the Internet. And make sure you keep the virus definition files up to date by downloading them from the maker's Web site.

Win95/98 systems is called Masters Paradise. This allows a hacker to take control of your PC. To do it a server has to be installed. It can be delivered embedded in programs and replaces sysedit.exe. You may never know it's been installed and is running on your PC – but the hacker will. Check **http://www.nsclean.com/boclean.html** for in-depth background information on trojans aimed at Windows users.

Scripts away

Scripts on Web pages, for example, are an unmixed curse. For the sake of eye candy we voluntarily defenestrate our security. A neat current example is from auction site, Ebay. For its own reasons Ebay allows JavaScript on its HTML-based item description pages – an obvious security hole.

Tom Cervanka wrote a JavaScript that waits for possible buyers to click on the item and then sends him their Ebay ID and password. He calls it Ebayla. At the time of writing Ebay is making vague threats to Tom Cervanka for this even though he did it publicly to draw attention to the problem (which Ebay says isn't a problem – doh). OK, we all hand out information all the time when we visit a Web page. The Web server can pick up lots of information about you and your software immediately – including the last page you visited – from your browser. With a bit of creative digging it can sometimes be tied into your identity.

Cookies on Web pages take this a step further and track your Web page and site visits, but to be honest, this isn't a lot more worrying than CCTV. Privacy enthusiasts complain about this kind of profiling but hey, no one can make you buy a company's products or services. Just say no.

Security holes in Microsoft's Net software (and software from others) are so common and so large much of it would pass the EU regulations applicable to commercial fishing nets. To get a feel for this check out the list of downloadable security patches at **http://www.microsoft.com/windows/ie/security**.

Fortunately, most are a little obscure and unlikely to affect standalone dial-up computer users.

Scripts on Web pages do, though, present problems for the security minded. There are two main issues: information collection and file access. At least five methods have been published showing how to use JavaScript to collect information typed into Web pages visited after you've visited a site with the sneaky script.

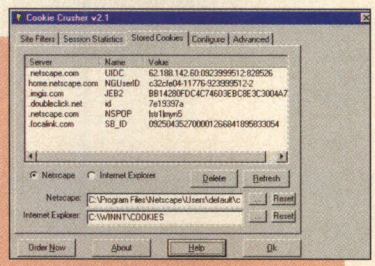
This information is usually returned to the script author. Some have been fixed, some haven't and some are waiting to be discovered. All are stopped if you turn off JavaScript support in your browser.

Even more worrying is the ability to read and write files using

Being anonymous

ON the Net, as in life, security is closely allied to privacy. What no one knows can't be used to hurt you. In fact Net software and Net use automatically hands out massive amounts of information even without the help of malicious Web page applets.

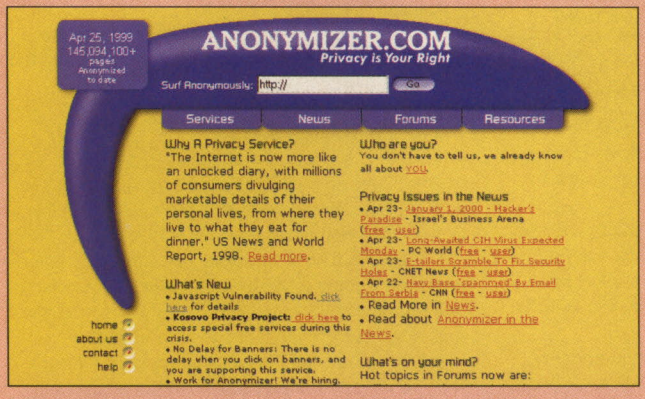
For example, any ICQ user you talk to can discover your current IP address. ICQ needs it to work but why does the ICQ user need it? Mirabilis (now part of AOL) is supposed to be fixing it. As already discussed, your IP address is the first thing people need in order to hack into your system. But you can make life difficult for others. For example, if you access the Web through a proxy server all anyone can get from your browser is the IP address of the proxy server – not yours. So, more speed and less risk. Don't like being profiled? Then delete cookies. It's usually too much hassle to disable them as far too many sites won't let you on at all if you don't accept them – but you can delete them to prevent effective tracking. Even better is to appear to accept them then delete them. There are lots of utilities to do this for you. One of our favourites is Cookie Crusher from **http://www.thelimitsoft.com**.



There are a number of anti-cookie utilities which accept cookies on your behalf and then throw them away or enable you to delete them. This is Cookie Crusher

Profiling is bad enough but Navigator hands out the personal info you put in, such as your email address, whenever you visit a Web site. IE 4 doesn't because it has a separate email client. You can stop it from the Edit menu. In Navigator 4 select 'Preferences' and 'Identity.' Delete the information in each of the five displayed fields. Finally, click on the Mail Server category and delete the information in all three fields. If the Identity and Mail Server categories are invisible, click Mail And Groups to get them back.

For ultimate invisibility try the Anonymizer, **http://www.anonymizer.com**, a company providing anonymous Web browsing. There's a delayed-action free version available.



Anonymizer can protect your identity whenever you're online, and there's a free service for one-off visits

NEWSGROUP NASTIES AND EMAIL ANGST

THE security problem with newsgroups is much less than with email. In newsgroups, your identity can be harvested for spam, but this is easy to defeat. Just use temporary addresses from the various free email vendors.

However, newsgroups are top of the list when it comes to places from which to launch new viruses and trojans. Melissa was first uploaded to a newsgroup.

The main risk, though, is from Web page links. These aren't always as advertised and can lead you straight to pages containing scripts or applets designed to do something you wouldn't have chosen to do if you'd known about it in advance.

However, newsgroups don't come to you, you choose to go to them – unlike email. At one time the worst you could expect from email was offensively bad spelling. But these days email is the major vector for macro and other viruses. These are relatively simple to guard against. Only send and accept plain text email. And, most importantly, don't run, or otherwise activate unknown attachments – delete them.

If you send Word files, for example, as email you're part of the problem. As discussed elsewhere, documents which can contain active binary or scripted content are inherently insecure.

Which brings us to the biggest single risk with email – identity. Emails are now regarded as legally admissible documents by courts, and often required as evidence. If someone successfully forges email which purports to be from you it will probably be accepted as authentic. Depending on the content someone may spend money on your behalf, take out an action for libel against you or publish a damaging story.

A password known to more than one person – you and those at your ISP – isn't secure: it's important to change it regularly. To demonstrate just how easy it is to pass off email – even without a password – set up an account for your granny at Yahoo! or Hotmail. You won't have to prove who you are or who she is but within minutes you can send a pretty convincing email.

ENCRYPTION SECURES

THE online equivalent of armour plating is encryption. Once the province of governments and those who believe governments are out to get them encryption is now providing the security required in an online world.

It's already used automatically in many situations. Real operating systems (not Win95/98) encrypt stored passwords and browsers encrypt credit card details when you buy online. You use these because they're automatic, but you can do a lot better.

Encryption enables you to prove the authenticity – or otherwise – of an email message or other document using digital signatures and it can be used to encrypt any file for storage or exchange.

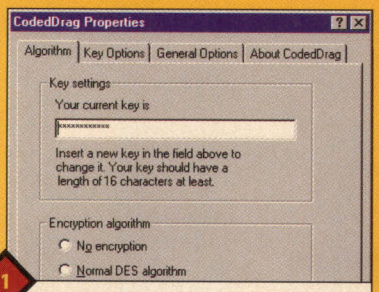
There are two major encryption types. The first is secret key and the second public key. The first includes protocols including DES and Blowfish. The same key is used to encrypt and decrypt in secret key schemes. Only someone with the key can encrypt or decrypt files. This makes them ideal for single person use but less than ideal for public use. Public key schemes include RSA, PGP (a variation) and schemes based on elliptic curves. They all involve a 'trapdoor function' which is any mathematical procedure which goes easily one way but with great difficulty the other way.

The clever part for users is the way they use two keys, a private and a public key. The private key stays absolutely private, and should only ever be known by you. The public key you publish.

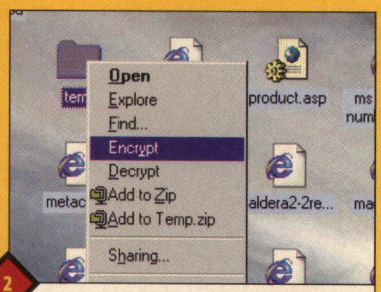
Anyone can encrypt any file using your public key but only you can decrypt it using your private key. The same technology is used for digital signing.

So what? Well, if you routinely encrypt data files you can stop worrying about sensitive, incriminating or embarrassing data falling into others' hands.

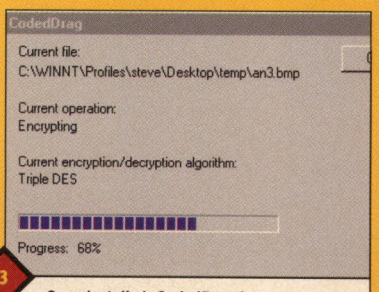
The ultimate encryption program is PGP, which does everything, but for local use we also like CodedDrag – **http://www.fim.uni-linz.ac.at** – which provides automatic, integrated encryption and decryption of files and folders from the right click context menu and Encrypted Magic Folders – **http://www.pc-magic.com** – which goes one step further and provides encrypted and invisible folders. Without the password no one can see, edit, delete or copy files from a magic folder. It's neat.



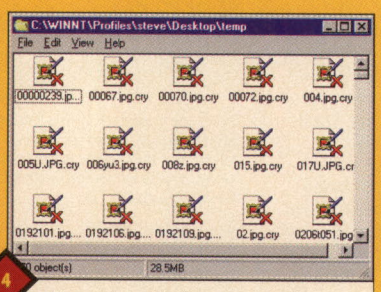
1 **The first time you invoke CodedDrag you have to provide a key – effectively your password. Lose this and you lose all your files**



2 **Here CodedDrag is encrypting a whole folder of files. If you drop more in and select encrypt again only the unencrypted files are affected**



3 **Once installed, CodedDrag becomes a part of the Desktop. Along with an icon on to which you can drop files and folders you also have new context menu options**



4 **You can scramble filenames as well as encrypt. The icons for each file gain a red cross to show which are encrypted. Double clicking automatically unencrypts files**

TOPTIP

If you don't want to be part of the Macro virus problem, only send and receive documents as plain text. And if you receive an unknown attachment, don't run it – get rid of it. Better safe than sorry.

JavaScript – features supposedly prohibited by the design but clearly not prohibited enough as there now appear to be a number of ways to do it. Which brings us to Java applets.

Technically, Java is a way to create applets for Web browsers or standalone programs written in an interpreted byte code. This code runs on a virtual computer called the Java Virtual Machine. The JVM is a program running on your computer.

Any Java applet should run on any computer using any operating system provided it has a JVM available. The original JVM implements a feature called a sandbox, which is intended to isolate the applet from your real computer.

Java applets in Web pages (though not standalone Java programs) cannot create, edit, write or read local files and can only establish a network connection to the originating server – mostly. They also have no direct access to your hardware.

All this effort is intended to make them completely safe to run. OK, in practice Java applets have turned out to be pretty reliable, but security bugs are being uncovered continuously and anyway, it isn't hard to program around them. In practice, most of these bugs are obscure and difficult for even an expert to employ, but then Sun released Java 1.1 and blew its own security model out of the water. In order to provide Java applets with more functionality, version 1.1 added a trust model (see the boxout 'Dangerously ActiveX') which it extended in version 1.2. Java applets from Web pages are now just as capable of trashing your data as any other unknown program.

In real life

A Java applet or JavaScript doesn't need to trash your system to cause you problems. Small-minded folk can write them to endlessly open new browser windows, display inappropriate images, send you to sites you didn't select, continuously play a music loop – and so on. Changing Web pages won't stop them – only closing down your browser.

However, if you allow Java applets based on trust certificates to run – and it turns out the author isn't trustworthy, you could find Java apps forging email from you, damaging or overwriting files, stealing your processor cycles for other folk's work, tracking your keystrokes and sending them to someone else (including passwords) along with lots of other goodies – or baddies depending on your point of view.

That's why it's called a 'trust model,' because to get it to work you have to be willing to trust complete strangers with total access to your computer.

Fortunately, you can easily restrict your PC to running only truly secure Java applets by setting your security high enough to warn when an applet wants insecure access – and saying no.

For the maximum control over what others can and can't do on your PC select View/Internet Options/Security and click the 'Custom' radio button. Now click 'Settings' to gain access to the permissions.

In Navigator 4 go to Edit/Preferences and click on 'Advanced.' Now you get to decide what runs and what doesn't. On the downside, you can't differentiate between Java applets that run in a sandbox and those that want insecure access.

Final thoughts...

Sure, taking precautions online is irritating. It breaks pages created by unaware or uncaring Web page authors, limits some of the fun you can have and tends to make you feel you're missing out. You're not. If people have a message they want to get across they aren't going to limit their audience by insisting you expose your computer to digital leprosy. Good sites don't even require you to view images.

On the upside, taking precautions online means you end up downloading less from the Net, which means your browsing speed goes up and your blood pressure comes down. Paranoia is good for you.

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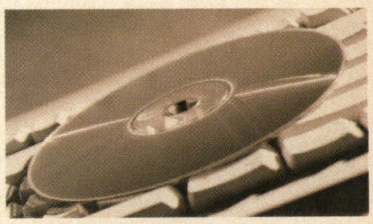

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PIII or not PIII?

Intel's new Pentium III benefits from a $300-million advertising campaign but how it will benefit you? Steve Patient investigates

Let's deal with Intel's TV ads first. These claim the Pentium III provides, among other goodies, the ability to speed up the Net. It doesn't. This is what's known technically as a lie. The perceived speed of the Net is determined by your connection speed and Net server efficiency.

Your Net experience would be little different using anything from a 486DX4 100MHz chip to a top-of-the-range multi-processor box based on several Intel Xeons. A PIII will not make Net access faster. As for the serial number issue, see the boxout.

The hardware hackers don't rate the PIII at all highly in terms of either raw speed or value for money

Technically, the PIII – previously codenamed Katmai – has the same core design as the old Pentium Pro. The Celeron, PII, PIII and the Xeon III (a PIII on steroids aimed at multiprocessor servers) all share the Pentium Pro's P6 core design at their heart. This was originally designed for a 150MHz processor and is now reaching its limits.

The major differences between these chips are the external motherboard speeds they support and their built in caches, called Level 1 (L1) cache. Celerons technically only support a maximum 66MHz motherboard speed while PII, PIII and Xeon III chips run on 100MHz motherboards.

All of these use variations on Intel's proprietary SEC (Single Edge Cartridge) to carry the processor and all fit Slot 1 motherboards, though this, too, is planned to change soon to a cheaper new design called Socket 370.

TOPTIP

Think about what you use your PC for before upgrading your processor. If you're into games and graphics, you may want to upgrade. If you just use word processors and email, why bother?

The great thing about standards is the number available to choose from.

So how great is it?

The PIII is (at the time of writing) available in 450MHz and 500MHz core speeds with 550MHz due soon. It's mainly going into servers though desktop systems are already available – albeit at fairly high prices.

Overall, PC system performance is dependent on the motherboard, memory and peripheral design, so doubling the processor core speed wouldn't double the system performance.

In practice, according to test results from Gateway, replacing a PII 450MHz processor with a PIII 500MHz processor results in about a 12 per cent speed improvement, which is about what you'd expect from the higher core speed. Hardly breakthrough stuff and not worth an extra 50 per cent on the cost of the processor.

Intel says you'll see better results when it goes from the current 0.25 micron die (the track width on the processor chip) to 0.18 micron. This will enable the PIII to go as fast as 1000MHz (1GHz) early next year.

Two other factors affect processing speed: cache and instruction efficiency. Processors have Level 1 (L1) and Level 2 (L2) cache – effectively very fast memory. This is necessary because the system memory runs at motherboard speeds, not core processor speeds, and so can't keep up.

L1 is on the processor and runs at full processor speed. L2 is separate, and often runs more slowly. The effect of cache memory is to make the system memory appear much faster to the processor so it doesn't have

THAT PESKY SERIAL NUMBER

INTEL has included an unusual feature in the PIII: the PSN or Processor Serial Number. This is a unique number built into each PIII which enables it to be identified remotely – over a company network or the Internet.

It's there not by popular demand but because Intel wants to stop the profit-cutting practice of overclocking processors – the 300MHz Celeron, for example, can be run at 450MHz and costs less than $100 (as against $750 for the PIII at the time of writing).

Intel touted it as protection for corporate PC buyers but the furore it caused took it by surprise. There have been demands for Intel to drop the feature and calls for boycotts of the chip.

In the US, the Center for Democracy and Technology together with the Gay and Lesbian Alliance Against Defamation and Consumer Action have filed a joint complaint with the Federal Trade Commission.

Like the others, they're worried the PSN will enable individuals to be accurately tracked on the Net without their knowledge.

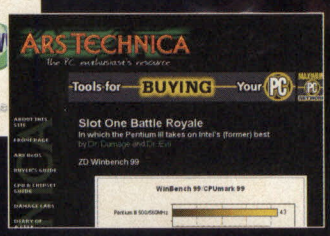
The complaint says the PSN will change the nature of the Net, remove privacy, make it easier for online stalkers and paedophiles to operate, and hamper the work of organisations ranging from those fighting sexual abuse to humanitarian and political groups seeking to defend individuals and communities from repressive regimes.

Intel responded by releasing a software utility which enables the feature to be turned off. PC manufacturers are going further and fitting PIII PCs with BIOS chips which turn it off at boot time. However, Canadian software company Zero Knowledge Systems then demonstrated an ActiveX applet capable of crashing a PC and grabbing the PSN during the 15 second gap during boot up when it isn't disabled – after which the control can report the number.

More importantly, although the PSN is intended to uniquely identify a specific system, hackers and engineers are already claiming the number can be forged by software on the PC. This raises the spectre of 'identity theft' on the Net.

Not so much 'Where do you want to go?' as 'Who do you want to be?'

At Intel's site you can read how wonderful the Pentium III is and how it will change your life – online and off



At Ars Technica you can read the results of some serious – and highly illuminating – comparative testing on Celeron, PII and PIII processors

to wait around for instructions and data.

PII chips have 32K L1 and 512K L2 on the cartridge running at half the processor speed. Celerons have 32K L1 and no L2. With Celeron A Intel added 128K L2. PIIIs have 32K L1 and 512K L2 running at half speed. The next version of the PIII will have full speed L2 on the processor – which will be faster – but it will only be 256K according to Intel.

So far there seems little advantage to the PIII. In fact many processor pundits are asking if the PIII name is anything more than a marketing exercise as it offers so little performance gain over the PII. Intel then points at the new instructions.

Game over

The PIII has 70 new instructions aimed at impressing gamers and improving PC multimedia performance. OK, follow this bit carefully. These new instructions are called SSEs, which stands for Streaming SIMD Extensions. SIMD stands for Single-Instruction, Multiple-Data – which means one instruction can be told to perform the same operation on a whole series of data bytes. SSE was previously called MMX-2 as well as KNI (Katmai New Instructions).

Software written to use the PIII's SSEs can process voice recognition, digital video and sound – along with some 3D graphic calculations – more efficiently. According to Intel's figures up to 20 per cent faster than a PII MMX.

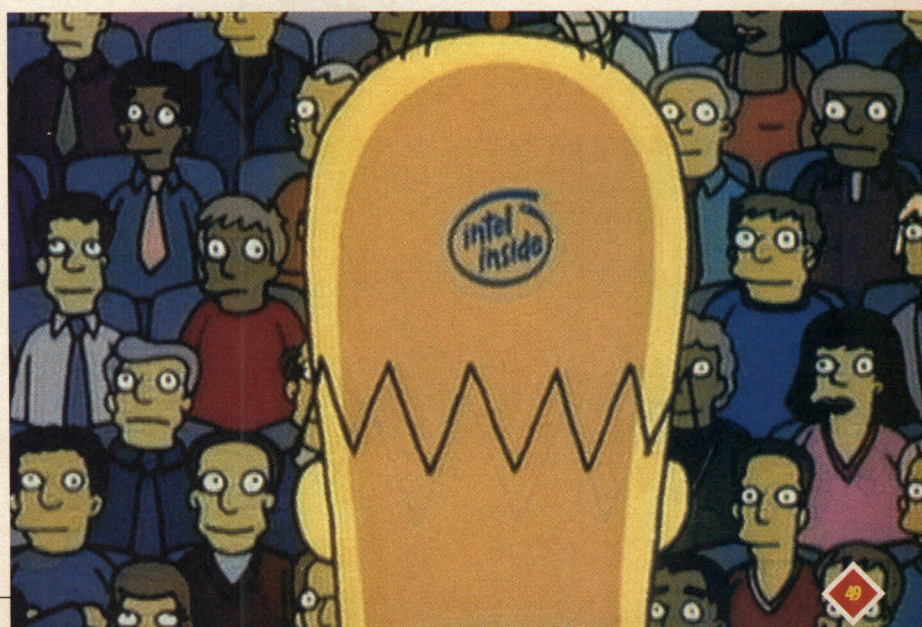
Microsoft is impressed. It's included SSE in the DirectX 6.1. At the time of writing there's very little else using it – a situation which may continue for some time as 3D graphics cards continue to improve performance for any processor. From a game company's point of view it makes more sense to support graphics cards than special processors.

For the final word on PIII speed issues check out Ars Technica (http://www.ars-technica.com) – haunt of the PC hardware heroes. You can see the results of some serious games and other tests on various Intel systems.

To summarise in a paragraph, the hardware hackers don't rate the PIII at all highly in terms of either raw speed or value for money (we won't consider Socket 7-based alternative processors from AMD and Cyrix here).

For this year at least there is no point in upgrading to a PIII – you can do at least as well for a lot less with a PII or Celeron-based system. And if Net access speeds are your main concern upgrading to a PIII-based system doesn't make sense.

In fact the whole release of the PIII doesn't really make engineering sense. It looks more like a PII.1 than a new generation processor and there's no reason to suppose the new SSE instructions will take the world by more of a storm than the original MMX instructions did. It looks as if Intel has released the PIII early, using older technology and minus several features as a marketing exercise. Expect to see the PII vanish, and watch as Intel tries to make the PIII the profitable top-end processor while the Celeron is left to fight off competition from the likes of AMD, Cyrix, IDT and the rest. It won't work, the competition is already capable of improving on current PIII performance at a lower price. PI



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ISP OF THE YEAR 97 internet

3Com 56K

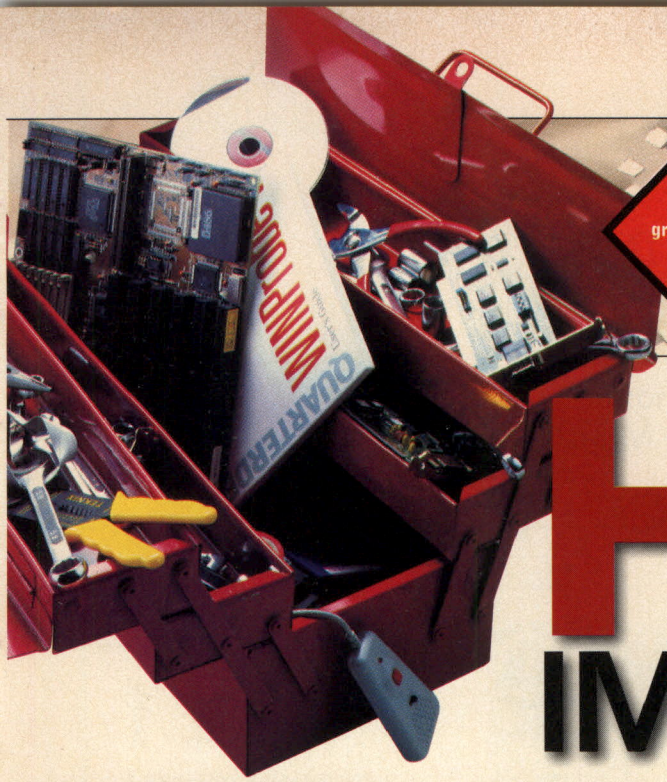
V90

Prestel on-line

INTERACT: PAGE 52
TOOLKIT: PAGE 54
DYNAMITE DOZEN: PAGE 56

TOPTIP

If you are creating a navigation system based on buttons, create a large graphic for all the buttons. Then use this issue's Building Sites to help you make an imagemap to link them together.



HOME IMPROVEMENT

Staying in touch with the latest Web browser technology is essential for home page authors. And, as **JAMES SEABRIGHT** shows, there's more than just Microsoft versus Netscape

Comment

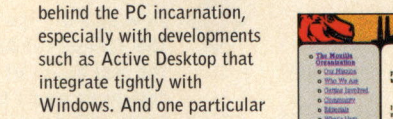
JAMES GETS ON HIS SOAPBOX AND SPEAKS HIS MIND

Every issue of *Practical Internet* is bursting with news stories about the latest technologies billed as enhancements to the Web. For example, the development of Java applets over the past four years has led to some very useful added functionality for the Internet, together with some indispensable spin-offs such as JavaScript. However, in the deployment of all such technologies, people often forget that some users stand to lose out. There will always be a large proportion of Net users who do not possess the latest software, or may choose to disable technologies like Java to speed up their Net access. Of course, the latest wave of palmtop computers with Web access also have limited functionality. Whatever the reason for not supporting new technologies, one thing is sure: Web sites must remain accessible to as close to 100 per cent of their users as is humanly possible. This doesn't mean having to go to any great effort – the Web designer simply needs to check that they are not blocking access to information by using JavaScript or similar technologies. Following this rule means that new technologies will always be enhancements, instead of penalising users for being behind the times.

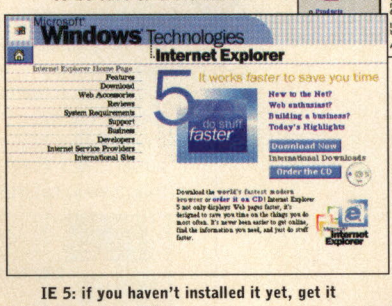
KNOW YOUR BROWSERS

Some alternatives to Netscape Navigator and Internet Explorer

IT'S round five of the browser wars, but from the Webweaver's perspective, Microsoft's Internet Explorer 5 isn't a huge step up from the previous version. The main changes are interface-related rather than concerning the browser's HTML handling. But one important point to note with Explorer is that the Mac version of the browser tends to lag behind the PC incarnation, especially with developments such as Active Desktop that integrate tightly with Windows. And one particular area where Netscape and Microsoft differ is in their implementation of JavaScript – so be sure to cross-check your scripts before using them online. Take a look at the browser's home page to find out more (**http://www.microsoft.com/windows/ie**). We've got IE 5 on this month's cover CD, so you don't need to download it.



Mozilla: the place to turn for Gecko



IE 5: if you haven't installed it yet, get it from our cover CD

Mozilla Gecko

As mentioned previously in Home Improvement, Netscape is trailblazing the future of Web browser technology under the guise of the open source Mozilla project, which is currently developing Gecko. This is designed to be a lightweight (and lightning-fast) browser, which will integrate seamlessly with all kinds of applications in an attempt to break down the barrier between local and network computing. More importantly for budding home page creators, the HTML engine in Gecko represents a considerable rewrite of that used in current versions of Navigator. With the preview release of Gecko being only 2.9Mb, it's a good idea to pop over to **http://www.mozilla.org**. Meanwhile, **http://www.netscape.com** still offers Communicator (or the faster option of standalone Navigator) for download. But there are still more options, such as Neoplanet and Opera.

FAST FACTS

While it's a good idea to keep graphics small in file size, there are times when large downloads may be required – for example, with detailed or images that are simply enormous. In this case, give your users a helping hand by making the size of large files clear before downloading has begun.

Neoplanet

NEOPLANET isn't a browser in its own right, but an attempt to make it easier to reach what you want on the Net. The software has a customisable interface all of its own, with configurable buttons linking in to popular sites. Other functions include downloading sounds for later use as background music. You may want to include instructions on your home page for NeoPlanet users, so they have a means of quickly accessing your pages. Or perhaps provide some music for them to download? Find out more at **http://www.neoplanet.com**.

Opera

OPERA is the leading independent browser. It has the specific mission of being faster, smaller and generally better than the Megabyte-munching superbrowsers. In fact the browser has the best CSS (Cascading Style Sheets, see last issue) of any software on the market. Download it from **http://www.operasoftware.com**.

Interact

Send James any questions about your home page, or submit your site to Site of the Month

TOPTIP

Remember that HTML tables can have background images and colours specified in the same way as the <BODY> tag of any page. Simply add BGCOLOR or BACKGROUND properties to the <TABLE>, <TR> or <TD> tags, depending on the part of the table for which the background is needed.

QUESTION TIME

Q **I read your frames tutorial in issue 26 which, although very useful, did not address my problem. I am trying to create four frames: a small square in the top left corner, a rectangle along the top edge and one along the left edge for a menu. The remaining frame is the main page. However, I can't get the system to work, and would be very grateful if you could look at this HTML code for me:**

```
<FRAMESET ROWS=92,* COLS=98,*>
<FRAME SRC=eye.html>
<FRAME SRC=ad.html>
<FRAME SRC=menu.html>
<FRAME SRC=main.html>
</FRAMESET>
```

Paul Curran

FAST FACTS

Recent studies show the average Net user only scrolls down on 25 per cent of pages they visit. The moral of this tale is to make sure that the top part of your pages are eye-catching and contain decent navigational links.

A You're almost there, Paul. One topic that I didn't go into for the frames tutorial was nesting, which is basically what you are trying to achieve here. Your main mistake is attempting to define both ROWS and COLS in the FRAMESET tag. Only one of these options can be used in any given FRAMESET, but this is not as limiting as it sounds. FRAMESET tags can, in fact, contain further FRAMESET tags without any problem.

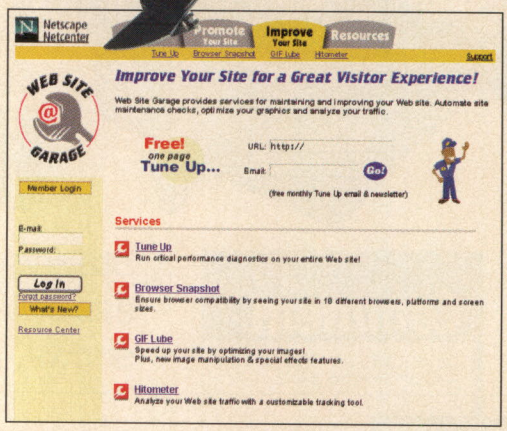
So, to make your code function, a couple of changes are needed, as shown below. The frames now work by two rows being created and these then splitting into two columns. This is only one way of solving the problem; it would also work to have the first FRAMESET defining COLS, then the other two specifying ROWS. You should think about which is the best way to do it, depending on your site – and remember it is always easy to change the FRAMESET at any time. It is also important to provide the normal <HTML> start tags, together with <NOFRAMES> information that will explain the need for a frame-compatible browser.

```
<FRAMESET ROWS=92,*>
<FRAMESET COLS=98,*>
<FRAME SRC=eye.html>
<FRAME SRC=ad.html>
</FRAMESET>
<FRAMESET COLS=98,*>
<FRAME SRC=menu.html>
<FRAME SRC=main.html>
</FRAMESET>
</FRAMESET>
```

Q **I'm finding it difficult to judge how large to make my Web pages. There are so many graphics I could use, and then there's the issue of just how much text to put on each page. Please give me a rough guideline to work with.**

Leonard Moore

A As ever with the Net, the best way of gauging public opinion is to see what other sites do. According to



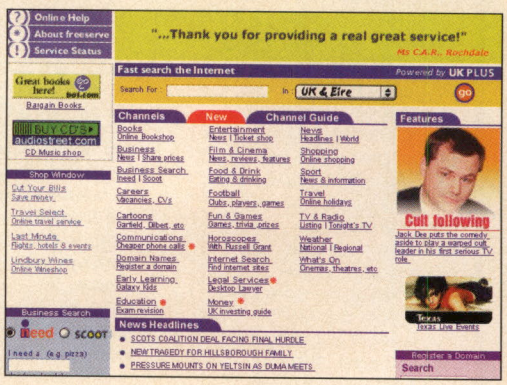
the Web Site Garage (http://www.websitegarage.com), the average load time for a page is 19.2 seconds on a 33.6k modem, which equates to around 15 seconds on a 56k device.

This works out at around 60 kilobytes of space for your HTML and image files, if you want to remain within the boundaries of the average. Bear in mind that there are still people using much slower modems. Based on this example, a 14.4k modem user would be hanging around for more than forty seconds waiting for a 60k page to load up.

Q **How do I use the free Web space offered by my ISP Freeserve? Also, I could do with some help on the real basics of HTML – any pointers to useful resources would be helpful. I'm tearing my hair out here, and at my age there isn't much left!**

Mick Short

A Freeserve is an increasingly popular hosting option for home page authors, because its servers provide fast and reliable access without any adverts in sight. You can access your Web space on the service by connecting to **uploads.webspace.freeserve.net** using your FTP client. This is a program that allows you to transfer files between your hard disk and an Internet server. The most popular client on the PC is CuteFTP (http://www.cuteftp.com), which presents an interface



READER'S TIP

ADVICE FROM LEO KING

Having read your glowing comments about BBEdit on the Mac, I went ahead and bought the package, and I'm finding it a great help with my HTML coding. I was particularly impressed to find how well it integrates with Macromedia Dreamweaver when I downloaded the free trial of that software. Your readers might be interested to know that the latest update to BBEdit, 5.0.2, is well worth getting hold of from the Web site at http://www.barebones.com. I find the new 'Gentle Compact' function is a godsend for tidying up my messy HTML, and there is apparently improved scripting of the HTML tools included in the update.

similar to the Windows Explorer, making it very easy to learn.

Anyway, when you've got your FTP client installed, simply enter the address already given, and then enter your user ID and password as with your normal Freeserve log-in (remember, john@smith.freeserve.co.uk would have the user ID smith and not john). As for getting started with the basics of HTML, I would recommend taking a look at our sister magazine, *Web Pages Made Easy*. This popular title takes you through the whole process step-by-step and is perfect for beginners such as yourself. Take a look at http://web.made-easy.net for more details on the magazine.

Q **Having followed your HomeSite tutorial to the letter, I am rather disappointed to find that all attempts to upload my Web pages have so far failed! My ISP ClaraNET hasn't been able to offer any help on the issue – can you save the day?**

Jayne

A HomeSite's upload facility can be a little troublesome at times. You need to make sure that HomeSite knows exactly which directory on the ClaraNET Web server to put your files on, otherwise it won't be able to make the transfer. If this is all proving too problematic, try using an FTP program such as Cute FTP from http://www.cuteftp.com to send the files manually. That program divides the screen into two vertical panes, one representing your hard drive, and the other the server's directory structure. Simply log on to the server, select the files on your hard disk, then drag them to the server window to upload them. Remember to include all the images used on the pages.

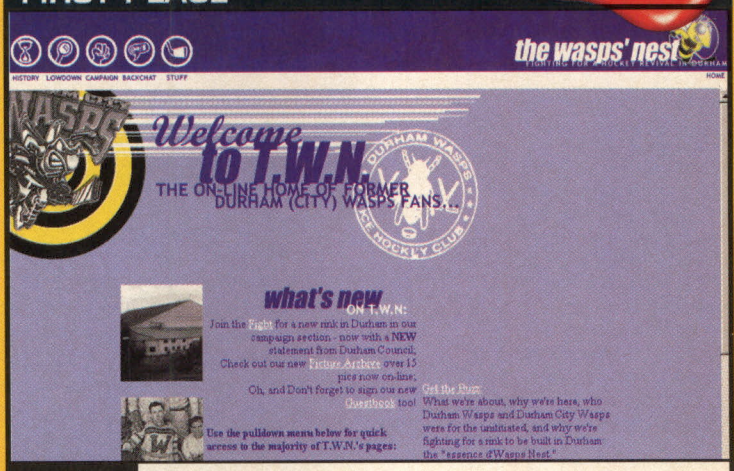
Site of the month

SEND JAMES YOUR SITE'S URL TO BE IN WITH A CHANCE OF WINNING SITE OF THE MONTH

WITHOUT doubt the most impressive element of The Wasp's Nest are the stylish graphics, which wouldn't look out of place on any professional site. The quality slips a little when it comes to combining images with text, although this is a minor quibble. The frame-based navigation system is excellent, and there are some impressive add-ons such as pop-up windows. Top stuff for a site that has only recently been redesigned!

SEAL OF APPROVAL Practical Internet

FIRST PLACE

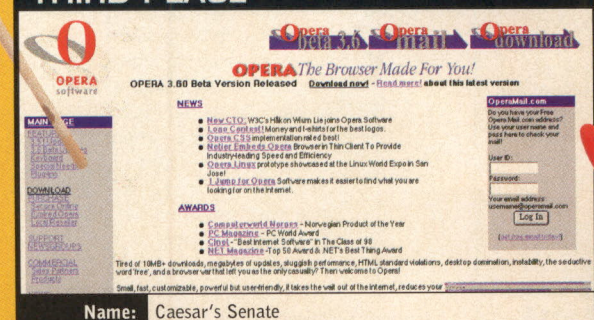


Name:	The Wasp's Nest (Richard Endean)
Address:	http://www.cityslicker.free-online.co.uk
Rating:	★★★★

SECOND PLACE

Name:	Blues and Two Js (John Meekings)
Address:	http://www.homeusers.prestel.co.uk/bluesandtwojjs
Uppers:	Neat navigation system, lots of material, well sized graphics
Downers:	Incredibly dull colour scheme, oversized text
Rating:	★★½

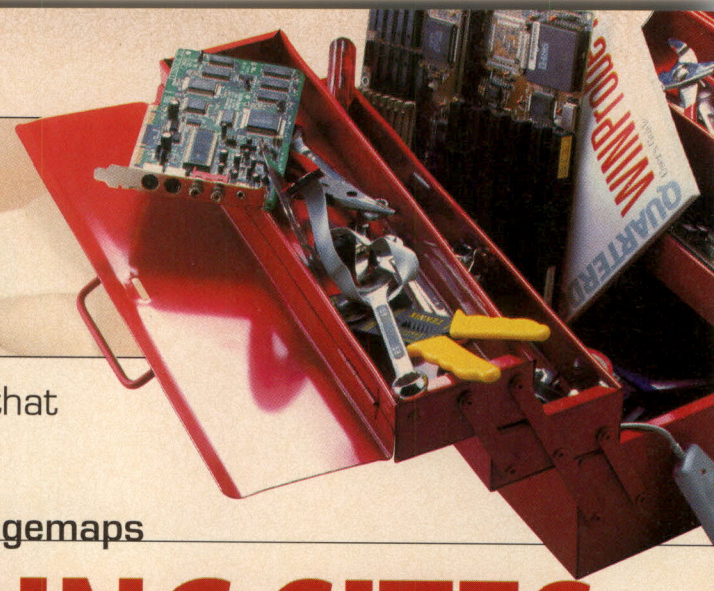
THIRD PLACE



Name:	Caesar's Senate
Address:	http://www.users.globalnet.co.uk/~sos
Uppers:	Tables put to good use, good user interactivity features
Downers:	Unnecessary and incompatible scripting

Toolkit

It's time to delve into James' tool box for that essential home page kit



In the fifth Building Sites, we look at imagemaps

WHICH OS?

THIS ISSUE, WE TAKE A LOOK AT WHICH OS OFFERS THE MOST TO WEB AUTHORS

Mac OS 8.5

If you're a Mac user, you might think there's not really a choice of Operating Systems for you. Well, this is wrong, because there are various flavours of Unix operating system that will work on the Mac (including MKLinux, **http://www.mklinux.org**). The latest version of the Mac OS has numerous helpful tools for Web builders. Without doubt the most useful is the enhanced colour palette, which actually has a 'Web colour' mode, together with the ability to specify a colour and then let the palette show you the closest 'Web safe' colour available. Also of particular use is the user-friendly Finder, with collapsible folder hierarchies allowing you to see exactly what files are where in your Web site structure. On top of all this, Macs remain the platform of choice for Web design pros, meaning that excellent software of both commercial and shareware varieties is always available to help you design pages.

Webweavers' Rating	★★★☆☆
OS Overall rating	★★★½☆

Windows 98

The biggest advantage of Windows is that a vast amount of cheap and free Internet-related software is made for it. As such, it is without doubt the best budget option of all those reviewed here. However, it doesn't offer the same integral niceties as the Mac OS, and you will have to do a good job of beefing up the system with add-ons to bring it up to a satisfactory level of Webweaving functionality. But throughout all of this you can take comfort in the thought that the majority of people who look at your pages will be using Windows. As a result, you can be sure that all the latest Web browser technology will always be released first on the Windows platform. Also, Apache has created a Windows version of its server that may help you with testing complex sites offline.

Webweavers' Rating	★★★★☆
OS Overall rating	★★★☆☆

BUILDING SITES Part 5

Imagemaps mean you will never get lost on your site again

ONE of the most common means of providing quick navigation around a site is through the use of a button bar that is hotlinked by an imagemap. In the bad old days of the Web, these had to be handled 'server-side' with the co-ordinates of the user's click being passed back to the Web server for it to decide where to send them next. Whilst it is still possible to use this method, virtually all Web browsers now support client-side imagemaps. This is where the HTML contains the map co-ordinates, and it is the Web browser itself that decides where the user should be sent based on the location of their click. This tutorial will take you through creating a client-side imagemap of your own.

1. Open your button bar design in your graphic design package of choice (e.g. Paint Shop Pro or whatever package you created it in). If you haven't yet made a button bar, do this first so that you've something to work with in this tutorial.

2. Decide which of the areas of the button bar you wish to have links in, and write them down on a piece of paper. You will soon need to note down the co-ordinates for each area that is hotlinked.

3. You need to have your graphics software show you the co-ordinates of where the mouse pointer is, a function normally found in the 'Info' palette (or possibly integrated in part of the window design). This is essential, as you must have accurate co-ordinates.

4. Move your mouse pointer to the top left-hand corner of the image. The coordinate readout should show 0,0 (or something close to that). Some paint packages use other origins for their co-ordinates, but all imagemaps are based on 0,0 being the top left-hand corner. If this isn't the case with your package, compensate by rotating or flipping the graphic so that what is normally the top left corner is positioned at the 0,0 point. Decide which of the areas of the button bar you wish to have linked, and write them down on a piece of paper. You will soon need to note down the co-ordinates for each area that is hotlinked.

5. Move your mouse to the top-left corner of the first area that needs to be hotlinked. Note down the co-ordinates of this location, taking the X co-ordinate first. Then move the mouse to the bottom right hand corner of the area in question. Note down these co-ordinates. Imagemap co-ordinates are based on the top-left and bottom-right positions only, with 0,0 being the top-left-hand corner of the whole button bar image.

6. Repeat step five for all the areas of the image that need to be linked up. With the sample button bar that's described above, you'll find that the regular pattern will make it easier to work out the co-ordinates as the starting X coordinate is always 0 and the final X co-ordinate is always 100 (the width of the image in pixels). When you have completed recording your co-ordinates, you should have something like this written down:

   Main page 0,0 to 100,50
   Biography 0,50 to 100,100

7. Close your graphics package, and open up the HTML file that will contain the button bar. If you just want to test the imagemap, then create a dummy HTML file instead with just the bare <HTML>, <HEAD>, <TITLE> and <BODY> tags.

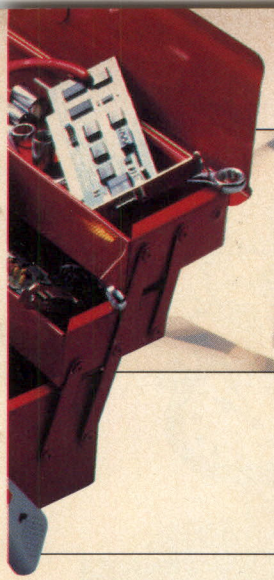
8. In the <HEAD> section of the HTML file, enter the following code:

```
<MAP NAME="buttonbar">
</MAP>
```

9. The code shown above is the framework for adding the hotspots. For each area that needs to be linked, you should add a line like this between the <MAP> and </MAP> tags:

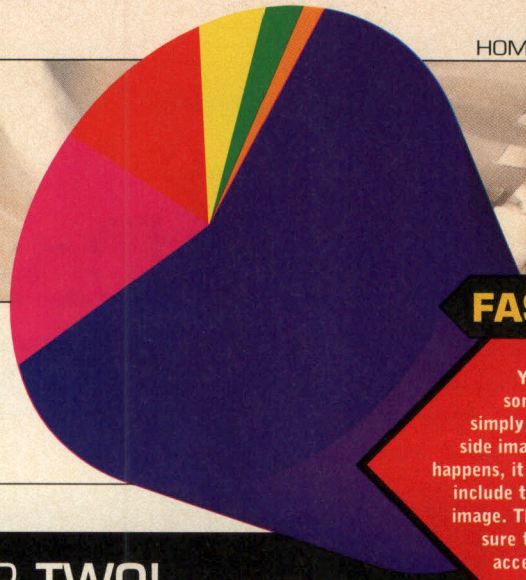
```
<AREA TYPE=RECT
COORDS="0,0,100,50"
HREF="index.html">
```

   Obviously, you need to replace the co-ordinates with your own, and the HREF should point to the page that will appear after clicking that area of the image. Note that co-ordinates



IN FOCUS >>

When developing content based on the latest Net technologies, it's easy to forget that not everyone has a Web browser that supports them. With JavaScript, it's often a case of who supports what version of the language, as these statistics from http://www.hitometer.com/show.



Version 1.2	59.1%
Version 1.3	18.3%
Disabled by user	12.6%
Version 1.1	15.4%
Version 1.0	3.1%
Unsupported	1.5%

FAST FACTS

You'll find that some old browsers simply can't handle client-side imagemaps. In case this happens, it is always a good idea to include text links alongside the image. That way, you will make sure that your pages are accessible to as many visitors as possible.

are entered as four numbers separated by commas. The finished <MAP> for the sample button bar looks like this:

```
<MAP NAME="buttonbar">
<AREA TYPE=RECT
COORDS="0,0,100,50"
HREF="index.html">
<AREA TYPE=RECT
COORDS="0,50,100,100"
HREF="biog.html">
<AREA TYPE=RECT
COORDS="0,100,100,150"
HREF="hobbies.html">
<AREA TYPE=RECT
COORDS="0,150,100,200"
HREF="links.html">
<AREA TYPE=RECT
COORDS="0,200,100,250"
HREF="contact.html">
<AREA TYPE=RECT
COORDS="10,280,45,300"
HREF="mailto:james@paragon.co.uk">
<AREA TYPE=RECT
COORDS="45,280,65,300"
HREF="http://www.icq.com/">
<AREA TYPE=RECT
COORDS="65,280,90,300"
HREF="http://www.aol.com/">
</MAP>
```

10 The final three <AREA> tags are for the 'QuickLinks' section at the bottom of the sample button bar, and could be changed so that clicking 'ICQ' links to an ICQ personal page, and clicking AOL links to Instant Messenger or a page at http://members.aol.com. These are just to show that you're not completely stuck with local links; in fact, you can send emails using them, as is shown with the mailto link above.

11 Now you need to enter the code to make the button bar appear, which is simply a glorified <IMG> tag: <IMG SRC="buttonbar.gif" WIDTH="100" HEIGHT="300" BORDER="0" USEMAP="#buttonbar">

Change the SRC, WIDTH and HEIGHT to fit your own image's location and dimensions. The BORDER command stops the browser from placing an ugly thick blue line around the image, and USEMAP refers to the <MAP> created in the <HEAD> of the HTML. The hash (#) in front of the name is essential.

FAST FACTS

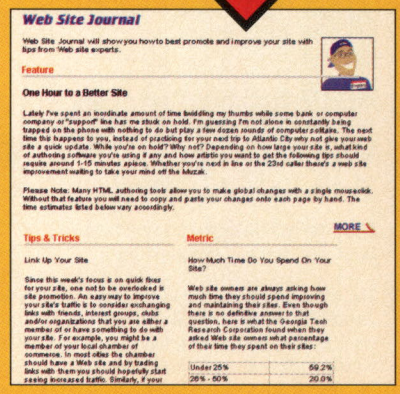
Try to design your Web pages so they display well on an 800 x 600 resolution screen. According to the Hitometer service at http://www.hitometer.com about half the computers connected to the Net use this resolution. You can find out what resolution your screen is running at from the Windows Control Panel or the Monitors & Sound Control Panel on Macs.

TOP TWO!

TWO SITES FOR THE HOME WEBWEAVER

Web Developer

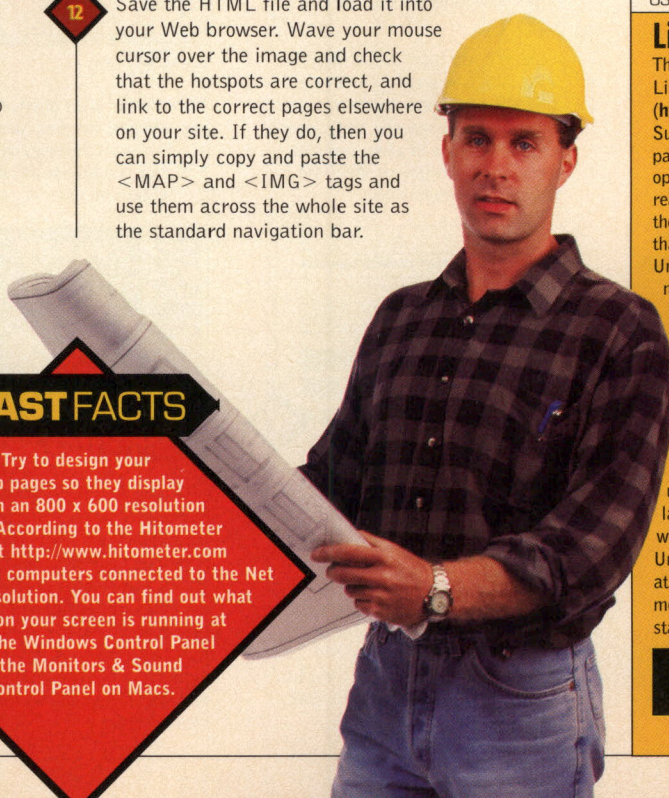
Getting stuck with a particular part of your home page? Web Developer at **http://webdeveloper.com** contains loads of tutorials aimed at home page designers, along with reviews of relevant books. There's a very good range of tutorials to be found here, from beginner-level through to more advanced topics.



Web Site Journal

If you're serious about keeping up-to-date with developments in Web design, give the Web Site Journal a go. Visit **http://www.websitejournal** and you can sign up for a regular email newsletter which includes interviews with Net personalities as well as examining issues of interest to the Webweaver.

12 Save the HTML file and load it into your Web browser. Wave your mouse cursor over the image and check that the hotspots are correct, and link to the correct pages elsewhere on your site. If they do, then you can simply copy and paste the <MAP> and <IMG> tags and use them across the whole site as the standard navigation bar.



OS CONTINUED...

Linux

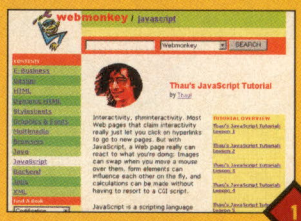
There are many different kinds of Linux available, although Red Hat (**http://www.redhat.com**) and SuSE (**http://www.suse.com**) are particularly popular flavours. The operating systems themselves don't really offer any great advantages for the Web builder, apart from the fact that most Web servers are run on Unix/Linux-based machines. These machines have many peculiar facets, such as rigorous access control functions and case-sensitive filenames. This means that developing a Web site on Linux is the only way of being sure how everything will work when it is put online. This is particularly true when you are using Perl or other scripting languages, the latest versions of which tend to be available only for Unix-based machines. Take a look at last issue's feature on Linux for more information about how to get started with the OS.

Webweavers' Rating	★★★★★
OS Overall rating	★★★☆☆

Dynamite Dozen

JavaScript is a simple yet powerful way of jazzing up your home page with special effects that can't be achieved with HTML alone. To find out how JavaScript might benefit your site, go to an online beginner's guide...

SPICE UP YOUR SITE!

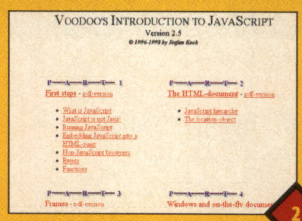


1

WebMonkey Tutorials by Thau

http://www.hotwired.com/webmonkey/javascript/tutorials/tutorial1.html

The WebMonkey site shows how JavaScript really should be done. There are five basic lessons to get you started, together with more advanced material for later digestion

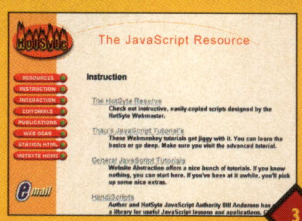


2

Voodoo

http://rummelplatz.uni-mannheim.de/~skoch/js/script.htm

Twelve individual tutorials teach JavaScript from the ground up, and the whole thing is downloadable in various formats, including HTML and Acrobat PDF formats. The creator of this site has actually written books (in German, alas) about the subject

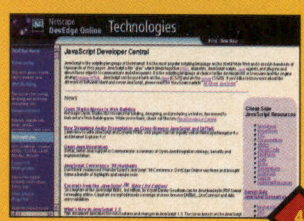


3

HotSyte

http://www.serve.com/hotsyte

Impressive and comprehensive are just two words that spring to mind after visiting HotSyte. Everything to do with JavaScript is well represented on this site, ranging from tips and tutorials to discussions, Q&A sections and plenty of sample scripts

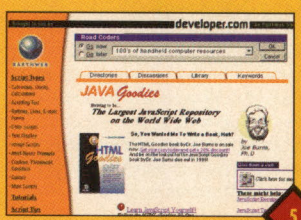


4

Developer Central

http://developer.netscape.com/tech/javascript

Coming from the people who created JavaScript, this site is very good, with everything under the scripting sun on offer. The site is handily divided up between client and server resources

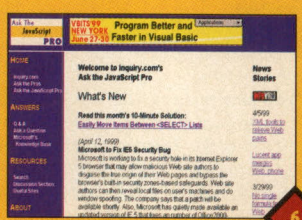


5

Java Goodies

http://www.javagoodies.com

This site comes from the same Web guru who created HTML Goodies (**http://www.htmlgoodies.com**), and there are links between the sites. This includes a 30 step JavaScript primer to inform users on the other resources on the site – including 500 freely available scripts

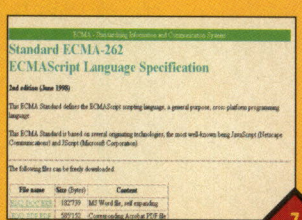


6

Ask a Pro

http://www.inquiry.com/techtips/js-pro

Aside from the main aim of this site, which is to give ordinary users the chance to have their JavaScript woes solved by an all-knowing 'pro,' there's a compelling mix of news, tips and online discussion groups. Also, see the other parts of inquiry.com

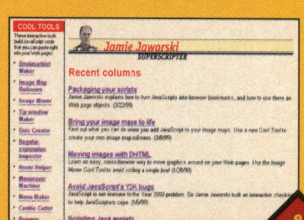


7

ECMA Script Spec

http://www.ecma.ch/stand/ecma-262.htm

ECMAScript is an attempt to create one standard scripting language, avoiding the differences between Netscape and Microsoft and offering the full specification for download



8

Builder SuperScripter

http://www.builder.com/Programming/Kahn

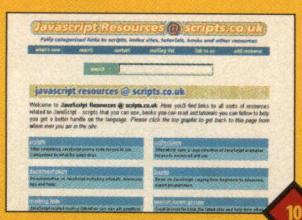
For many months, this URL pointed to a column by Charity Kahn, goddess of all things JavaScript. She may have departed the builder.com team, but her scripts live on

9

Javascript Source

http://javascript.internet.com

At the time of visit, 312 scripts were available from this site, with everything covered from cookies to background effects. A free newsletter will keep you up-to-date with new resources as they come online. Useful for free scripts but not a lot more



10

scripts.co.uk

http://www.scripts.co.uk

An impressive site from this side of the Atlantic, that offers plenty of scripts that are fully searchable by function or keyword, together with absolutely oodles of other material. You'll find that links to newsgroups, relevant books, and mailing lists abound at this site. It's also a really well designed site that's easy to follow

11

Dynamic IT

http://javascript.connect-2.co.uk

Dynamic IT is one of the few sites that properly embraces the important links between Dynamic HTML and JavaScript. The outcome of this will hopefully be that more people feel like they can create their own dynamic material rather than basing everything on templates from Web editing software

12

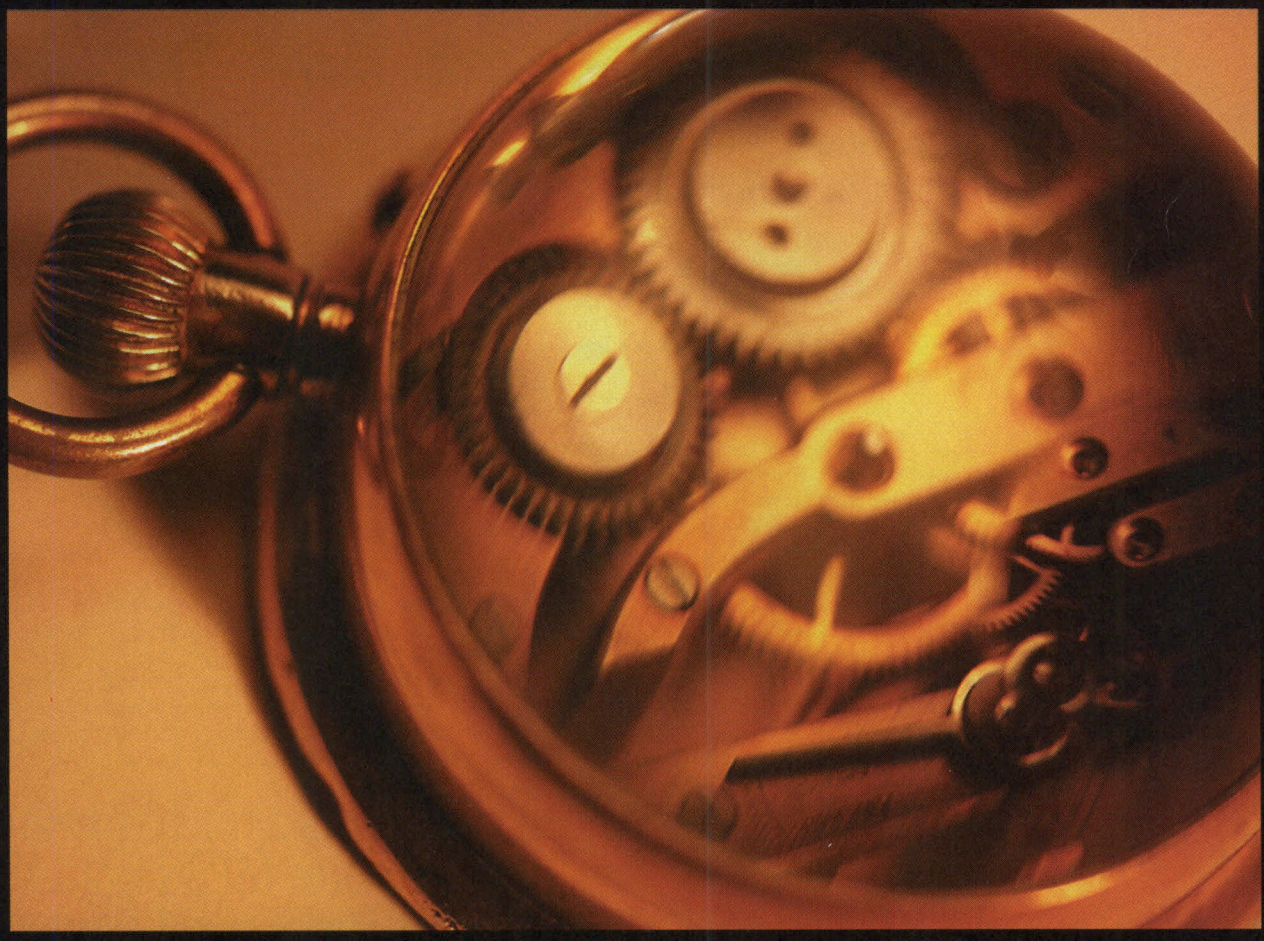
JSWorld.com

http://www.jsworld.com

It may be more news and feature orientated than most sites, but JavaScript World still has a good number of free scripts that are tucked away. Join the online forums to engage in discussion about your JavaScript problems – and who knows, you might even find that you have the answer to somebody else's question

free domain names

at twelve.net we register your domain name and pay the naming fees*, then get on with sorting out the workings. we provide nightly web statistics, fast UK servers, free frontpage extensions, full telnet/ftp access, and then offer different hosting packages depending on your requirements.



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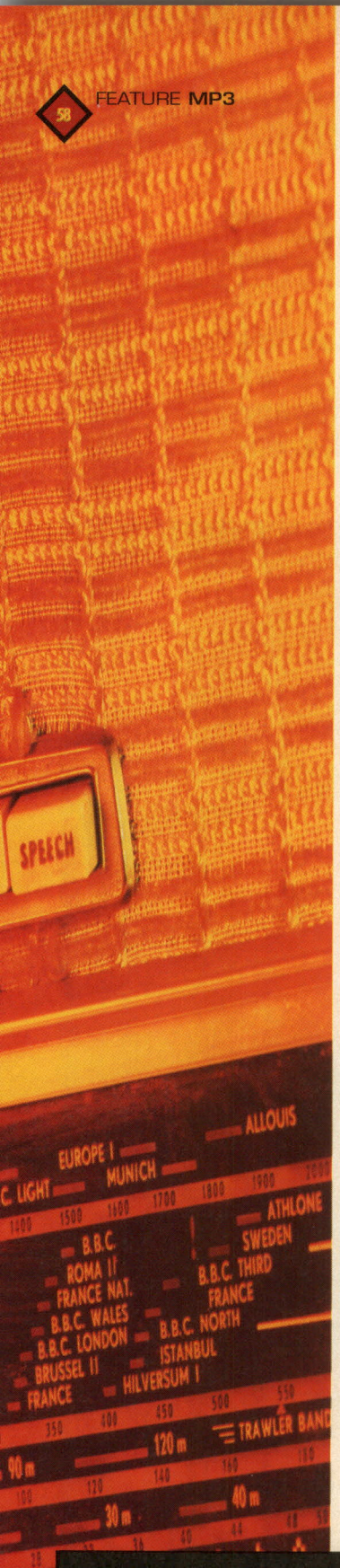


THE DIGITAL JUKEBOX

The music press is hyping MP3 and music lovers think it's the best thing since sliced bread. But what do record companies, artists and retailers think of this audio format? **JO CHIPCHASE** investigates the music industry's opinion

According to statistics from the Jupiter research agency, by the year 2002, two per cent of global music sales will be via digital download. This is not an insignificant figure when you consider that during 1998, £1.0182 billion worth of product was shipped to retail outlets by the UK music industry alone. But many record companies fear copyright infringement will occur via MP3 – an audio format that compresses music to around a tenth of the size of CD files and gives near-CD quality reproduction.

MP3 files are downloaded in their droves from sites such as http://www.mp3.com, and have become immensely popular with Internet users. However, because of the potential for people to pirate music from MP3, by saving files to their hard drive and copying them to CD, the music industry is displaying a mixed reaction towards this format. In the US, the Recording Industry Association of America (RIAA) at http://www.riaa.com has been making loud noises against MP3s. It claims MP3s of copyrighted music are illegal, even if the end user already owns the CD. The RIAA recently issued an injunction against Diamond Multimedia, in an attempt to keep its Rio PMP300 portable MP3 player out of production – on the grounds that the Rio would encourage illegal reproduction of copyrighted music. Two UK industry bodies, the International Federation of Phonographic Industries (IFPI) and the British Phonographic Industry (BPI), backed the injunction. The RIAA is also trying to enforce licensing for Webcasting of copyrighted material, whether in MP3 or RealAudio format. In the past, the organisation has applied pressure to ISPs to ban MP3s from Web sites, and has issued lawsuits against the perpetrators.

Pirates' paradise?

Despite the reaction of bodies such as the RIAA, various Net-savvy record labels and artists are using MP3 as a tool to promote their music. Some labels are making tracks available via mp3.com, while others are releasing MP3 promos. For example, Underworld recently released a promo track on MP3 for one day only, and received a considerable amount of press

The RIAA has applied pressure to ISPs to ban MP3s from Web sites, and has issued lawsuits against the perpetrators

Dominic Hawken: favours MP3 as a promotional tool for independent labels

HOW DOES MP3 WORK?

MP3 (short for MPEG-1) compression works by examining an audio file and calculating how to describe it more efficiently. The process is similar to the way a JPEG file compresses images – for example, a region of a graphic file containing 1,000 adjacent white pixels is summarised by defining the border of the white area, rather than repeating the code for white 1,000 times. MP3 carries out this type of compression and accounts for the way in which we hear.

Besides frequencies beyond our hearing range, there's a complex set of relationships between sounds that prevents us hearing all the sounds produced. For example, when a sound at one frequency is very loud, a quieter sound at a nearby frequency is masked. By applying perceptual audio coding, MP3 removes the data representing masked sound without sacrificing overall audio quality. The result is that an MP3 file needs just 128,000bits, instead of 1.4Mbits, to reproduce a second of CD-quality music: a compression ratio of about 11 to one. It is possible to put more than 10 hours of CD-quality music on to a CD by using MP3.

THE MUSIC RETAILERS' VIEWS

WITH THE POSSIBILITY OF THEIR PROFITS BEING ERODED BY PIRACY AND ONLINE MUSIC SALES, DO HIGH STREET MUSIC RETAILERS FEEL THREATENED BY INTERNET MUSIC TECHNOLOGY, OR NOT?

"WE need to use the potential of the Net, rather than seeing it as an enemy to be feared," says Gennaro Castaldo, head of press and PR at HMV (**http://www.hmv.co.uk**). "We firmly believe that most Net-related sales, whether legal or illegal, will be peripheral and will not affect our main sales. People may not perceive that MP3s saved on to CD have the same value as a store-bought product, although there is the element of underground culture. They want to go into stores and be tactile with products and browse.

"It's difficult to say with MP3. Part of the difficulty is that we're all speculating – the hype is ahead of the reality, led by the media. The media sees MP3 as sexy, and it becomes almost a self-fulfilling thing. In five years' time, it might be another technology that people are taking advantage of. Music is not just about selling some data. The traditional retailing avenue will be sustained."

Simon Bornam, PR manager at Virgin Megastores, agrees that MP3 will back up the traditional retail channel. "We see MP3 as very positive. It's another avenue that can be used to expose new music and help new artists break through. Anything that achieves this is beneficial."

He thinks people will be encouraged to buy more of what they've heard via MP3, which is likely to stimulate online CD sales.

He does not think MP3 will increase piracy.

"People pirate things already – such as copying on to blank tapes and minidiscs.

At the end of the day, they will do it anyway."

coverage. Geri Halliwell is employing a 30-second MP3 clip as a promotional tactic.

Not all labels are embracing the promotional potential of MP3 and other Internet audio formats – and this especially true of the majors. One of the most vociferous protectors of copyright in the UK music industry is major label Sony. It has introduced a clause to its contracts for new artists, that gives it ownership of their Web sites and stipulates that the artists have to hand over a percentage of any profits gained online.

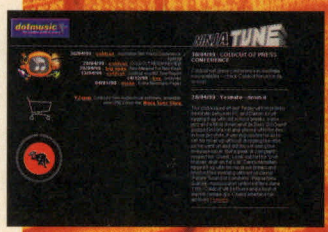
Gary Farrow, Vice President of Communications at Sony Music UK, says: "MP3 is a continued worry and a threat. We are concerned with protecting intellectual property rights and copyright. As a promotional tool, MP3 can possibly assist, but it is far outweighed by the problem of protecting artists. I don't want to comment further than that, and I won't comment on the clause in artists' contracts."

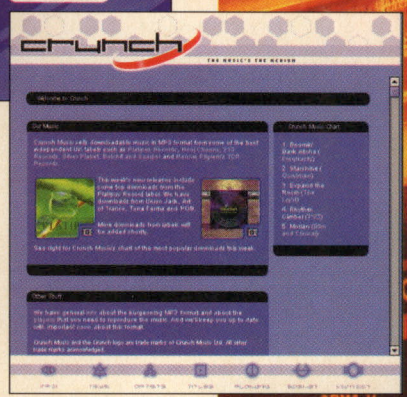
The British Phonographic Industry (BPI) exists to represent the interests of its members, which include major labels such as Sony. The BPI is currently lobbying the European Community to introduce legislation that will back up existing copyright provisions – for example by covering MP3. The BPI is also working with the International Federation of Phonographic Industry (IFPI) to co-ordinate initiatives globally, and is part of the Secure Digital Music Initiative (SDMI), which encourages technology companies to work with record companies to ensure people get paid for their music. Sarah Roberts, Communications Co-ordinator at the BPI, says: "MP3 can be viewed on all sorts of levels. The majority of MP3s don't have clearance for use, and there's no system for collecting royalties for artists. On broader terms, MP3 is a useful marketing tool and it is opening up the Net for music sales. Legislation needs to back up the technology, and there needs to be a secure method of tracking music on the Net."

Eighteen months ago, Radio 1 fell victim to industry fears over audio on the Net, when it was forced to remove RealAudio sessions of the Breakfast Show from its Web site at **http://www.bbc.co.uk/radio1**, under pressure from the BPI and major record labels. The issue was prompted by an MP3 piracy scare over Madonna's comeback single *Ray of Light*. Radio 1's audio files got caught in the piracy bandwagon, although, as Managing Editor Ian Parkinson points out, serious bootleggers wouldn't bother pirating anything recorded in such a low quality format.

He explains: "The BBC is in a different position to other broadcasters. We have to do everything by the book and were an obvious test case. The major record companies were concerned about copyright implications and we had to take off the sessions because of a dispute with the BPI." However, according to Parkinson, Radio 1 is now close to reaching an agreement that will allow audio streaming.

http://www.almightyrecords.com. It's an almighty relief that the design of this site is better than the music...





Crunch Music (http://www.crunch.co.uk): testing the water with pay-for MP3 downloads

Independents embrace MP3

Jon Bunney of the music division at Foresight New Media (**http://www.foresight.co.uk**) works with Sony, Domino Records and *NME*. He points out that concerns over copyright exist throughout the entertainment sector. "Record companies are only comfortable if they have some level of ownership over content. There is less control if you have more than a 30-second clip of music on an MP3 file, so 30 seconds appears to be the break-off point. MP3 is not ideal over a 28k connection and dodgy speakers, so you may not be showcasing the music effectively anyway."

Bunney's view is not entirely shared by Dominic Hawken, a director of London-based AL Digital (**http://www.aldigital.co.uk**). AL Digital has various innovative projects under its belt, including streaming the audio for an Internet radio station and operating the well-equipped Whitehouse recording studio in Chiswick. Dominic is also a director of independent pop label Volume Records (**http://www.volumerecords.co.uk**) and drum 'n' bass label Federation Records (**http://www.federation.co.uk**), which use audio files to promote their releases.

Dominic is in favour of using MP3 as a promotional tool for independent labels and artists. He says, "MP3 gets music to a much wider audience than other

Forward-looking people have registered the domain names mp4.com to mp13.com, in anticipation of advanced MPEG standards arriving

channels, which means more people are likely to buy the record. Major labels find MP3 scary, as it cuts out the distribution channel."

Bad attitude

He compares the attitude of majors and independent labels to free software distribution. "If Microsoft is releasing a commercial product, it can't publish the source code, as this is its 'ace in hand.' However, software such as Apache is based on open code, and people are free to use and enhance it. The same attitude can apply to MP3."

Through its Internet radio project, AL Digital has streamed RealAudio for some time. The company is now moving into MP3 streaming – a technique that achieves very high quality audio, but results in much higher bandwidth usage than RealAudio. To Dominic's surprise, the company's 'Backroom Radio' project, which streamed tracks in MP3 as a test venture, quickly attracted considerable attention from Internet users, and entered the top five on http://www.shoutcast.com. "The launch of Apple's QuickTime 4 will be important for MP3 streaming," says Dominic. "It has MP3 in the background and will open up the format for everyone."

Keeping it real

Web design agency Kleber (http://www.kleber.net) is responsible for creating innovative and eye-catching

RECORD COMPANY SITES – WHAT YOU'LL FIND

LABEL	LOCATION	AUDIO FORMATS	WHAT'S THERE?
Almighty Records	http://www.almightyrecords.com	RealAudio	A cool, shocked site with interesting audio samples related to the icons. What a shame the music on here is a dire selection of noddy house/euro disco/general pap.
AM:PM	http://www.ampm.co.uk	Shockwave, QuickTime	Nice design. Artists include Ultra Nate, The Absolute.
Big Bang	http://www.bigbang-records.co.uk	aiff, wav (short clips on home page)	A Glasgow based label. Artists include Rosie Gains.
Blanco Y Negro	http://www.wea.co.uk/blanco	QuickTime movie	A subsidiary of Warner. Artists include Bandalu and Catatonia.
BMG	http://www.bmg.com	No audio samples are evident	The design of this site resembles music zine, Dotmusic.
Carrera	http://www.carrerarecordings.com	No audio samples are evident	Disgusting site design. FrontPage circa 1996. Yuk!
China Records	http://www.china.co.uk	RealAudio	Chinese dragon graphics and artists including Morcheeba, Levellers, Zion Train.
Creation Records	http://www.creation.co.uk	RealAudio, some Shockwave and QuickTime	Oasis, Primal Scream, Teenage Fanclub, etc. A nicely designed site.
EMI	http://www.emination.co.uk	RealAudio, aiff, wav	Some cheesy artists, such as Cliff Richard and Iron Maiden, are featured. You'll also find Robbie Williams, Fun Lovin' Criminals and Chumbawamba.
Island (UK)	http://www.island.co.uk	RealAudio	U2, PJ Harvey, etc.
Ninja Tune	http://www.ninjatune.net	aiff	Nice site... excellent artists... oh, what a terrible shame we can't find anything on Mixmaster Morris!
Rephlex	http://members.home.com/fresh/rephlex	No audio samples are evident	Pretty cool site – the Aphex twin is behind this somewhere.
Parlophone	http://www.parlophone.co.uk	Shockwave	Pet Shop Boys, Beastie Boys, Supergrass, Blur, etc.
Second Skin	http://www.s-skin.demon.co.uk	RealAudio	King Kooba with samples from his 'Throne Room'!
Skint	http://www.skint.net	RealAudio	Fatboy Slim, Lo Fidelity Allstars and other Skint artists. The content is OK, but the design needs improving.
Sony	http://www.sonymusic.co.uk	RealAudio – on the German pages	All sorts of big name artists.
Substance	http://www.hydrogendukebox/substance	aiff	Rather good underground drum n bass. Interesting audio samples are related to the icons.
Virgin	http://www.the-raft.com	au	Cassus, Daft Punk, Air, Skunk Anansie and the Verve are featured, amongst many others. This site is aimed largely at students.
Warner ESP	http://www.warneresp.co.uk	No audio samples are evident	Nasty dance compilations. Avoid.
Warp Records	http://www.warprecords.com	RealAudio	A nicely designed site. Artists include Red Snapper, Nightmares on Wax.
WEA	http://www.wea.co.uk	Shockwave	A subsidiary of Warner. Artists include Arkana, Seal, Madonna. Selected tunes are featured in the 'Jukebox' section.
Whoop!	http://www.whoop.co.uk	MP3 – one-minute samples of tracks	UK house label linked to the 'Whoop it Up!' club night. The site has a strange, fragmented design.
XL	http://www.xl-recordings.com	RealAudio	Prodigy, Basement Jaxx, etc.

sites for the likes of Suede (http://www.suede.net), Warp Records (http://www.warprecords.com) and the new Creation site at http://www.creation.co.uk. Rather than using MP3 on its sites, Kleber favours RealAudio and Shockwave, as it is "reliable to have the audio content within the browser."

Chris McGrail, Creative Director of Kleber, says: "For delivering samples, Real Audio is the de facto standard. We haven't used MP3 yet, because established labels haven't moved towards selling them yet. Majors tend not to want to talk about MP3, while indies are very curious – they want to do what they can with the format."

He is in favour of using audio samples to encourage online music sales. "A lot of indie labels are doing well selling product via the Web, an example being music from Siouxie Sioux, which is uncool but doing well – it has outperformed all expectations. Warp Records has also transformed its business with its site." Chris points out that, because of bandwidth restrictions and telephone charges, nothing on the Net is actually free, and that people are, in effect, paying for the audio content they download – even if the artist is not getting any reward.

Pay as you download

One way to ensure artists and publishers gain revenue from MP3 is to charge for downloads. But can you sell MP3s online, when people are accustomed to obtaining them for free? Crunch Music at http://www.crunch.co.uk is investigating this proposition, by offering underground dance tracks in MP3 format for 99p per download. "Soft launched" during February 1999, Crunch is testing the market with an initial bunch of 100 tracks.

According to Managing Director Jon Davis, reaction to the venture has been positive from users and artists alike, and this enthusiasm has encouraged the Crunch team to keep going. Jon sincerely believes that free and pay-for MP3s can exist together. "Free MP3s will still have their place. It depends on whether artists want to make money from it, or if they want to use it as a promotional tool."

Jon emphasises that MP3 can provide a low-cost distribution channel for record companies. One of the advantages of online music retail is that there are no returns, whereas traditional retailers send records and CDs back if they have not been sold. "The Net is shaping up to be of major importance for the music industry. The people who want to work with us see the potential of digitally distributing music and achieving wide distribution at low cost. Independent artists are naturally quite excited about it, as their work is being heard on a wider scale."

Sample Morcheeba from the comfort of your seat on China Records' site

Virgin says it sees MP3 as "very positive... people will pirate things anyway"

Legal and legitimate

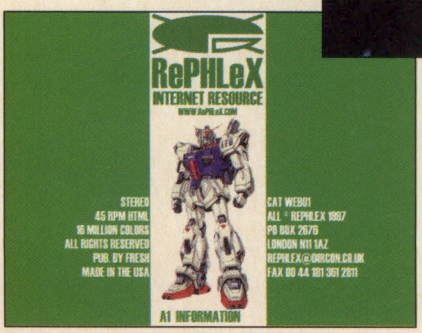
Rennie Pilgrem spearheads the breakbeat side of Crunch. Rennie became involved with Crunch after he remixed a track from another featured artist, The Light. He is in favour of legitimising MP3, as he considers legal sales to be better for artists and labels: "If MP3s are provided for free, the people who made the music are losing out."

Rennie fully advocates the value of MP3 as a promotional tool. "Underground producers and artists can't reach a wide audience, as distributors – of which Woolworths is the biggest – have a stranglehold and go for the lowest common denominator. MP3s remove this influence, and make cutting edge tracks available. They circumvent A&R, which is fantastic. Hopefully, A&R people won't be around in five years time."

Record companies may come round to Rennie's way of thinking about A&R, as approximately 13 per cent of turnover is allocated to this function. "MP3s will be sought by persons who are interested in the particular music," says Rennie, "rather than it being shoved down people's throats." However, Simon Plastiq, a London based recording artist, DJ and record plugger, is less than enthusiastic about the use of MP3 for record promotion. "MP3 will no doubt grow, but it will take a while. They said vinyl was going to die 10 years ago and it hasn't. No one's going to persuade me to use MP3s. What other bloody formats am I going to use? Technology moves so quickly these days, it pisses me right off."

Radio 1's Managing Editor, Ian Parkinson: RealAudio sessions fell victim to piracy paranoia

Rennie thinks it would be "fantastic" if MP3 killed A&R



Rephlex has quite a roster... but no audio samples on-site

MPEG moves on

Plastiq might have a valid concern, as the technology is continually progressing. MP4 is currently under development (Public Enemy claims to have an MP4 beta), and another standard is evolving as part of MPEG4 called AAC, which is supposedly twice as good as MP3, and it requires the same bandwidth. Forward-looking people have registered the domain names mp4.com to mp13.com, in anticipation of advanced MPEG standards arriving. As Dominic Hawken points out, "there will always be a better technology that people want to get into." In the meantime, music lovers are begging for digital solutions, and MP3 provides an adequate answer. Rather than trying to stamp out digital music piracy – a task that is nigh on impossible – the music industry should look to the low-cost benefits of digital distribution. PI

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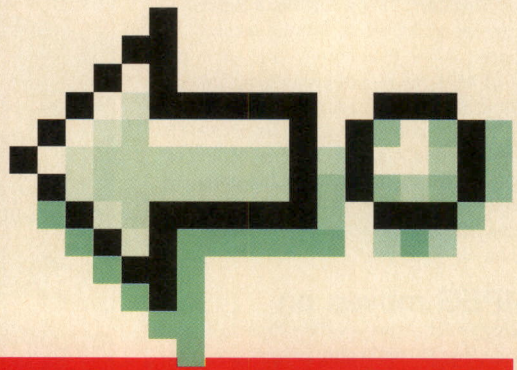

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HOMESITE 4: PAGE 64
NEOPLANET: PAGE 66
MULTIPLE ISPS: PAGE 68
iCAB: PAGE 70

INFO

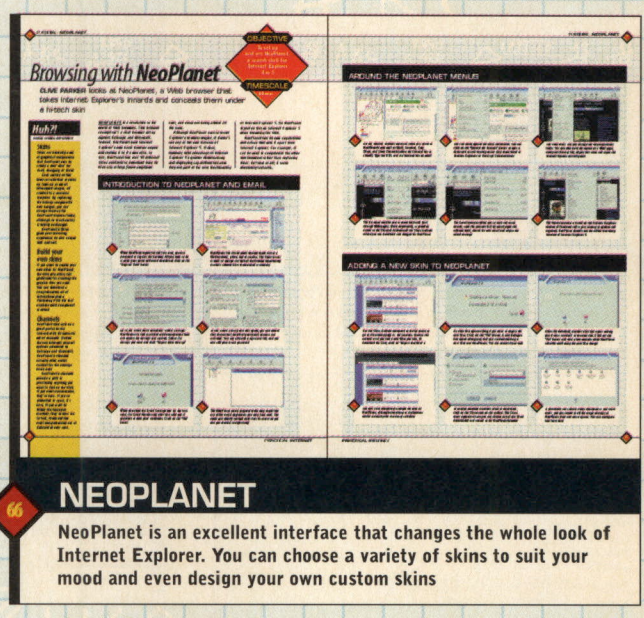
Each issue, we provide tutorials for different aspects of Net usage. If there's anything in particular that you would like to see covered, email us at pi@paragon.co.uk

NET SCHOOL

It's time to head back to the classroom for some essential lessons to brush up your Net knowledge

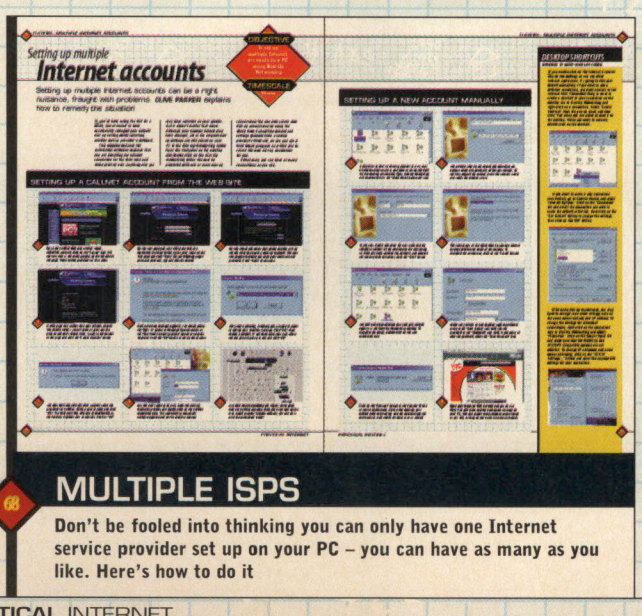
64 HOMESITE 4

If you want to make your home page something special, forget the graphical editor for a while and give Homesite 4 a spin – it makes adding special effects a breeze



66 NEOPLANET

NeoPlanet is an excellent interface that changes the whole look of Internet Explorer. You can choose a variety of skins to suit your mood and even design your own custom skins



68 MULTIPLE ISPS

Don't be fooled into thinking you can only have one Internet service provider set up on your PC – you can have as many as you like. Here's how to do it

70 iCAB

Mac users aren't stuck with a choice between IE and Navigator for Web browsing. There's a new browser called iCab that's quick to download and uses minimal system resources

Building with Homesite 4

OBJECTIVE

To master the many menus and icon commands of Allaire's Homesite 4 Webweaving program. It's the best text-based HTML editor on the market so give it a go!

TIMESCALE

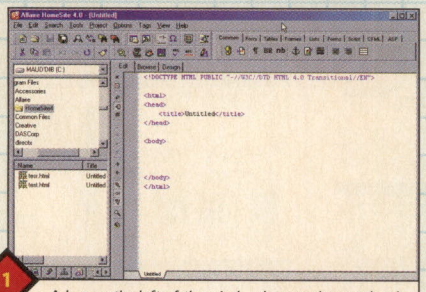
90 mins

If you want to add JavaScript or other scripting language elements to a Web page, you need a powerful text-based editor. **CLIVE PARKER** can't get enough of Homesite 4

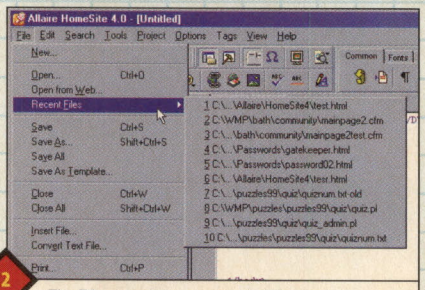
WHAT you see is what you get (WYSIWYG) style HTML editors are great tools for would-be Web page designers to get started. Easy-to-use applications like Microsoft Frontpage or Dreamweaver make it a simple task to create great-looking pages for beginners and for more advanced designers alike. But when you reach a certain level of competence in Web design, you start to realise there's more to Web pages than text, images, tables and forms. You realise that it's a good idea to make your pages interactive, so when someone clicks on an element in a page, something happens. To achieve this you need Java, Shockwave and Flash plug-ins or a scripting language. Or perhaps even CGI scripts.

So you need a tool designed to create Web pages in the traditional text-based way. Not because graphical applications don't let you look at the code; most of them do. But using a purpose-built tool like Homesite can really make creating this kind of content a breeze. As long as you know how to use the scripting languages, of course.

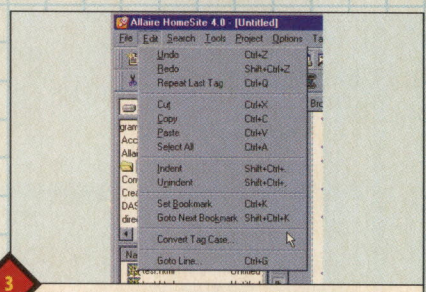
MENUS, ICONS AND SETTINGS



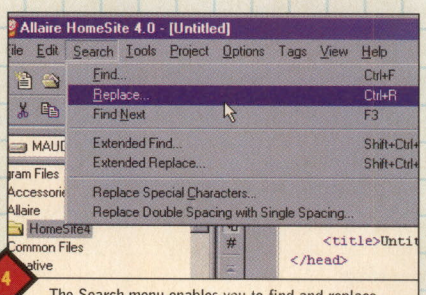
1 A bar on the left of the window lets you browse hard drives, folders and files. The main editing window is on the right. The toolbars have a host of icons and tools enabling you to edit Web pages



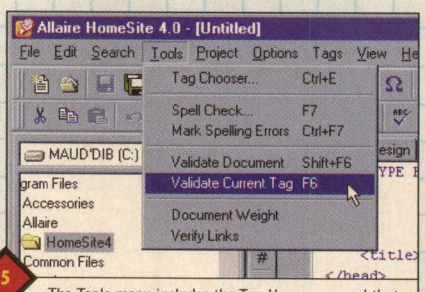
2 The File menu lets you to control the way you use your Web pages. You can open local files, or open Web pages directly using the 'Open from Web...' command and open your most recently used files



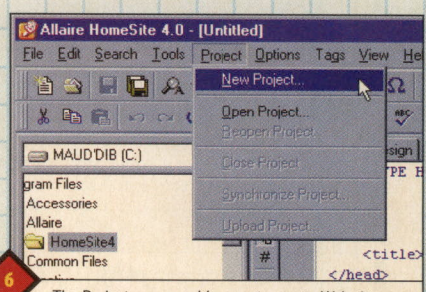
3 The Edit menu has the usual editing tools you'd find in a word processor, plus specific commands such as bookmarks. You can also go directly to specific lines using the 'Goto Line' command



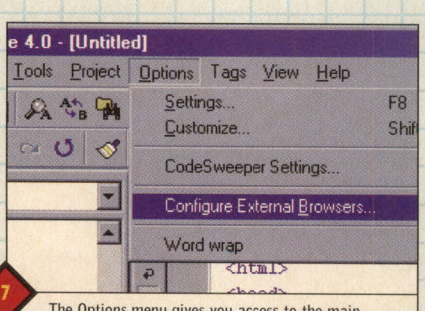
4 The Search menu enables you to find and replace HTML code and text. The Extended versions of the commands give you more precise control, such as replacing special characters



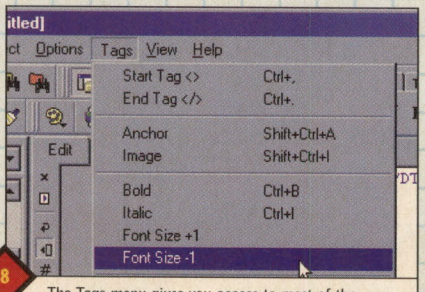
5 The Tools menu includes the Tag User command that enables you to add new tags to Homesite. A spell checker is included along with a document validator that check to see if your code is legal



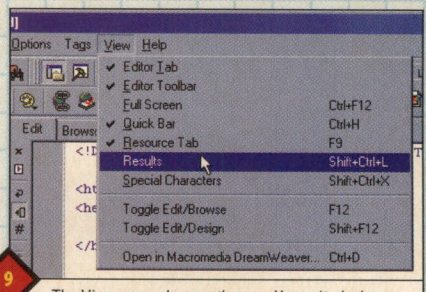
6 The Project menu enables you to create Web sites as individual projects, so you can access and manage all of the data for a specific site you are working on. This menu makes it simple to manage Web sites



7 The Options menu gives you access to the main settings and enables you to customise the toolbars and keyboard shortcuts. You can also set up external browsers to check your code



8 The Tags menu gives you access to most of the HTML tags you will need in a Web page, along with their keyboard shortcuts



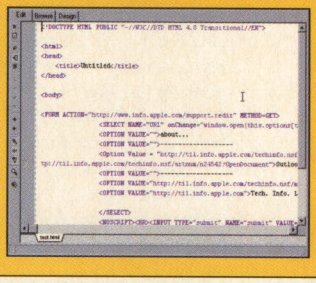
9 The View menu changes the way Homesite looks on screen. You can toggle toolbars on and off, edit full-screen and so on. You can also link Homesite to Dreamweaver for a total editing environment

USING THE TABS IN THE MAIN EDITING WINDOW

GET TO KNOW YOUR TABS...

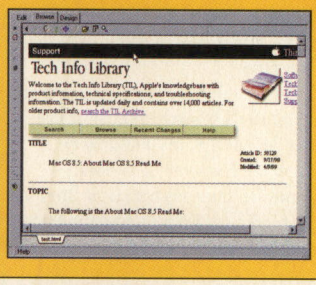
Edit

THE Edit tab has the most obvious use. It lets you edit the code of the file you are working on directly, allowing you to create and add new content. Down the left-hand side of the window are several small icons. These tools are shortcuts for editing the file and allow you to specify word wrap, show line number and so on.



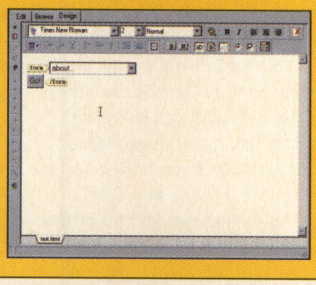
Browse

THE Browse tab gives you a quick preview of what your page looks like in a Web browser. While it doesn't offer all of the commands and functions available in a full-blown Web browser, it does have the usual back, forward, stop and refresh buttons in the toolbar above the window.



Design

THE Design tab gives you an editable, graphical view of the page that you are working on, so you can use word processor-style tools to lay out the text on the page in much the same way as using a graphical Web tool like Dreamweaver – without having to open a full application.

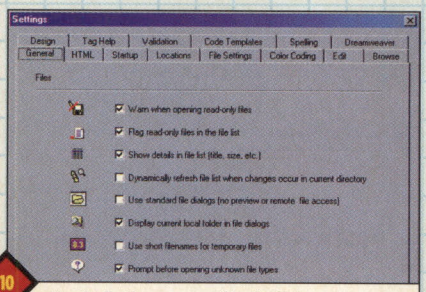


Huh?!

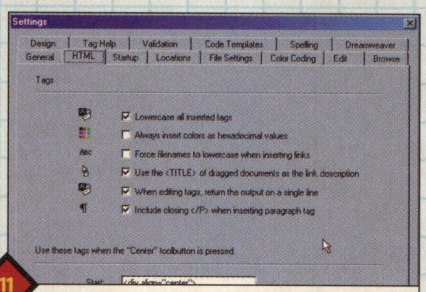
HTML MADE SIMPLE

HTML

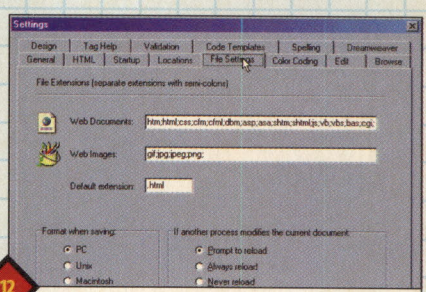
Hypertext Markup Language is the set of codes inserted in a file so that a Web browser can display a page. The markup tells the Web browser how to display a Web page's words and images. HTML is defined by Netscape and Microsoft as they add changes to their Web browsers and by the World Wide Web Consortium (W3C). A new version of HTML (HTML 4) has been officially recommended by W3C, making this level an effective standard.



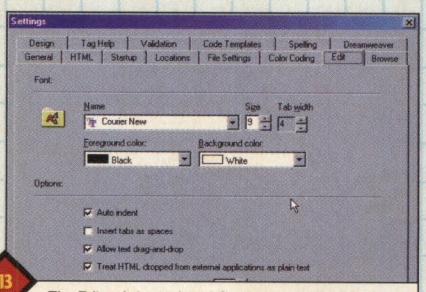
10 Use the Settings command in the Options menu to configure Homesite. The General tab enables you to get warnings about read-only files, show file details and view the current folder in the display



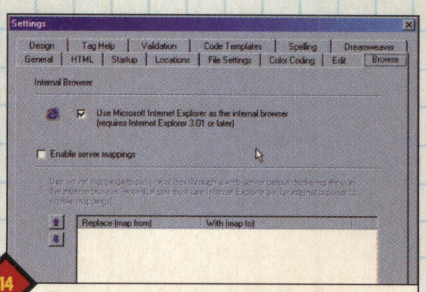
11 The HTML tab controls how your code looks. You can choose upper or lower case, the type of CENTER command, the closing </P> in a paragraph tag (not really required) and define how colours are listed



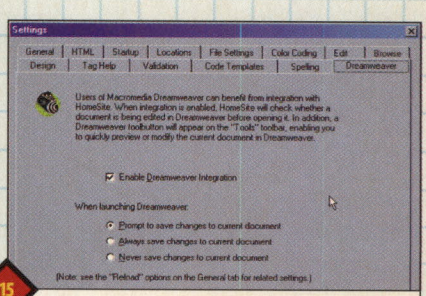
12 The File Setting tab determines what file types are editable within Homesite. You can add new file types in the Web Documents bar, image types in the Web Images bar and define the default file extension



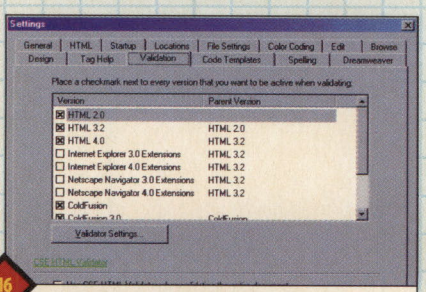
13 The Edit tab is used to define how your document looks as you edit it. You can choose the font face and size, define the width of tabs, choose a font colour and background colour



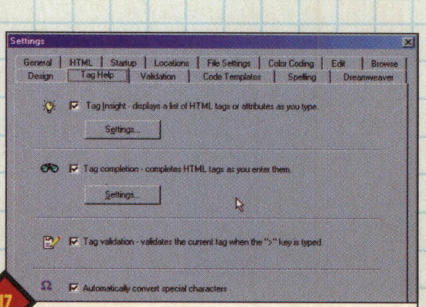
14 The Browse tab lets you define Internet Explorer as the internal browser used by Homesite for the Browse window display



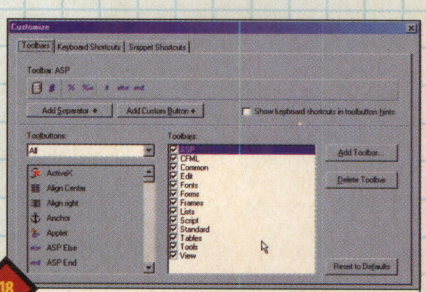
15 If you have Dreamweaver, you can integrate it with Homesite so you can switch seamlessly from one editor to the other for modification. The code will not be altered when you do this



16 The Validation tab is used so you can check if your code is valid with previous versions of HTML, enabling it to be viewed in older browsers. You can also validate browser-specific commands



17 The Tag Help tab enables you to set up Tag Insight where Homesite will suggest a tag every time you start to type one in. This can get annoying, so turn it off if you don't like it



18 The Customize command in the Settings menu enables you to redesign the look of Homesite so it works better for you. You can change toolbars and keyboard shortcuts from here

OBJECTIVE

To set up and use NeoPlanet, a superb shell for Internet Explorer 4 or 5

TIMESCALE

60 mins

Browsing with NeoPlanet

CLIVE PARKER looks at NeoPlanet, a Web browser that takes Internet Explorer's innards and conceals them under a hi-tech skin

Huh?!

THOSE TERMS EXPLAINED

Skins

Skins are basically a set of graphical components that NeoPlanet uses to create a new 'skin' for itself, changing its looks.

Each section of the browser interface is made up from an array of bitmapped images, all created to a common template. By replacing the bitmap images with new designs, you can change the way the NeoPlanet browser looks, although its functionality is totally unchanged.

NeoPlanet's Skins gives your browsing experience its own unique look and feel.

Build your own skins

If you want to create your own skins for NeoPlanet, the Web site offers full guidelines for creating the graphic files you need. You can download a comprehensive set of instructions plus a Photoshop PSD file that explains each component in detail.

Channels

NeoPlanet also acts as a great portal to the Internet with its fantastic set of channels. Unlike the two different channel systems pioneered by Netscape and Microsoft, NeoPlanet's channels actually offer useful content for the average home user.

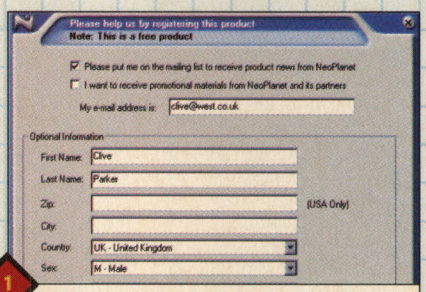
NeoPlanet's channels provide a path to practically anything you want to find on the Web. If you want screensavers, they're here. If you're interested in sport, it's here. If you want to follow the financial markets, they're here too. In fact, these are the most comprehensive set of links we've ever seen.

NEOPLANET is a revolution in the world of Web browsers. This brilliant concept isn't a rival browser set up against Netscape and Microsoft. Instead, NeoPlanet uses Internet Explorer's own basic browser engine and clothes it in it's own skin. In fact, NeoPlanet has over 50 different Skins available to download from its Web site at http://www.neoplanet.com, and more are being added all the time.

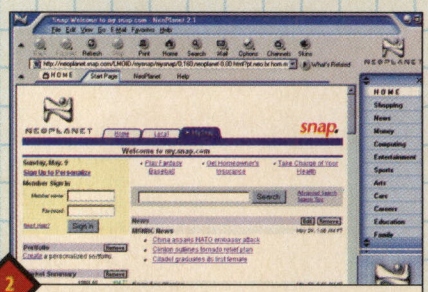
Although NeoPlanet uses Internet Explorer's browser engine, it doesn't use any of the new features of Internet Explorer 5. It does, however, take advantage of Internet Explorer 5's greater downloading and displaying capabilities because they are part of the core functionality of Internet Explorer 5. So NeoPlanet is just as fast as Internet Explorer 5 when browsing the Web.

NeoPlanet has its own capabilities and extras that sets it apart from Internet Explorer. For example, it can be used to compliment the other two browsers rather than replacing them. But best of all, it looks absolutely fantastic.

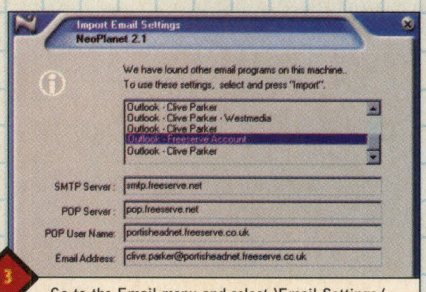
INTRODUCTION TO NEOPLANET AND EMAIL



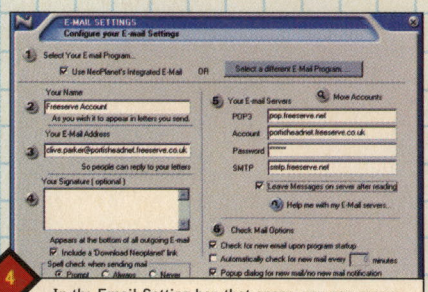
1 When NeoPlanet opens for the first time, you are prompted to register the browser. All you have to do is enter your name and email details and click on the 'Register Now' button



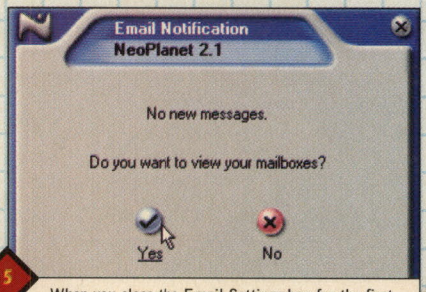
2 NeoPlanet has all the usual buttons found within a Web browser, plus a few of its own. The Skins button is used to change the look of the browser by selecting another scheme from those stored in memory



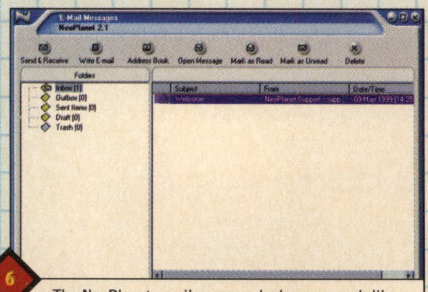
3 Go to the Email menu and select 'Email Settings.' NeoPlanet can find any other mail accounts you have and import the settings into its own. Select the settings you want and click 'Import these settings'



4 In the Email Setting box that opens, you can ensure that the correct details of your email account are included. You can also add a signature file, and you can add your email password

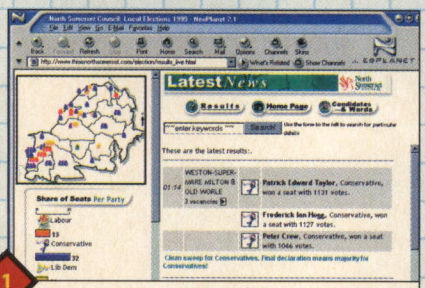


5 When you close the Email Settings box for the first time, the Email Notification alert box asks you if you want to view your mailboxes. Click on the 'Yes' button

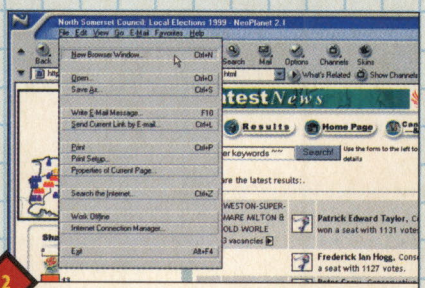


6 The NeoPlanet email program looks very much like any other email application you may have used. The icons are clearly marked with their functions so you can get started straight away

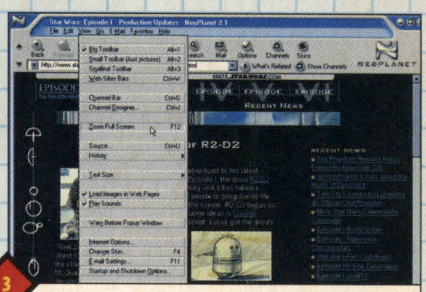
AROUND THE NEOPLANET MENUS



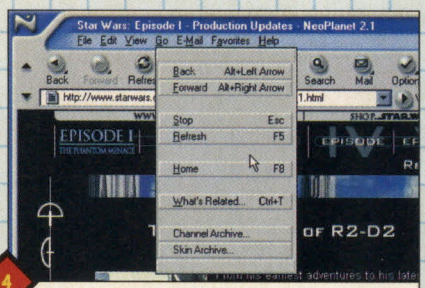
All the familiar browser icons are there plus some of NeoPlanet's own such as Back, Forward, Stop, Skins, and Show Channels (when the Channel bar is closed). Type the URL into the location bar as usual



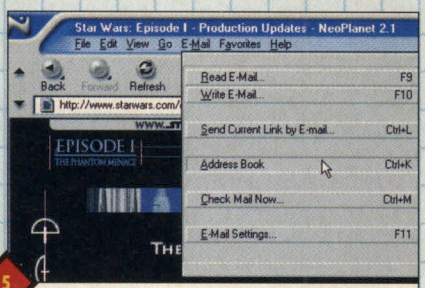
The File menu sports the usual commands. You can click on the 'Search the Internet' button to open a dedicated search facility easier than those found in Internet Explorer or Netscape Communicator



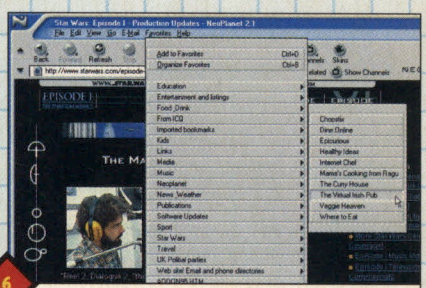
The View menu lets you change the way NeoPlanet looks. You can also view the source of a Web page, view your History file, adjust font sizes and open the Internet Options control panel



The Go menu enables you to move back and forth through Web pages. More importantly, it provides access to the Channel Archive and the Skins Archive where you can download new designs for NeoPlanet

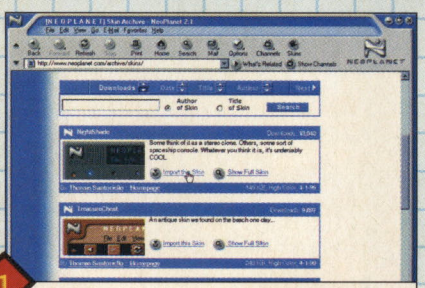


The Email menu enables you to read and write emails, send the current link by email, open the address book, check for new email and adjust the email settings

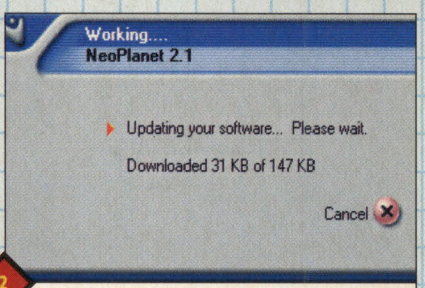


The Favorites menu is based on the Internet Explorer version of Favorites and is just as easy to update and organise. NeoPlanet doesn't use the offline browsing features of Internet Explorer 5

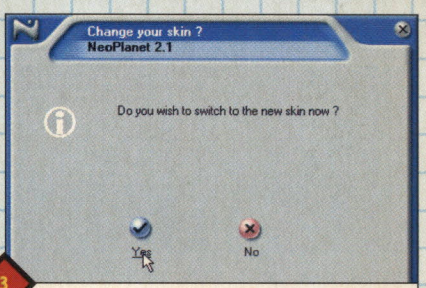
ADDING A NEW SKIN TO NEOPLANET



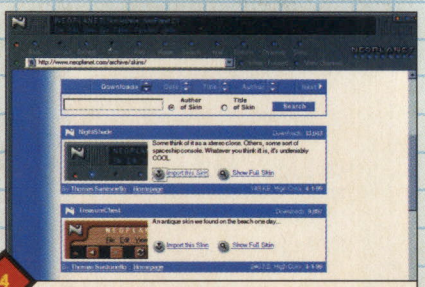
Use the Skins Archive command in the Go menu to go to the archive page on the Internet. Browse the archive until you find a new Skin you like. To download the Skin, click on 'Import this Skin' e



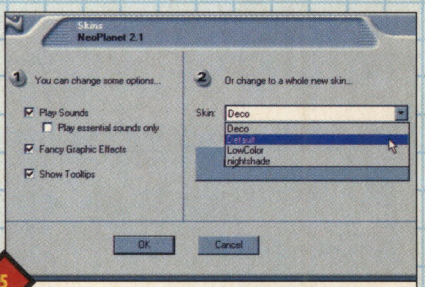
An alert box opens asking if you want to import the new Skin. Click on the 'Yes' button. A new dialogue box opens telling you that you are downloading a new Skin into NeoPlanet. You can cancel if you wish



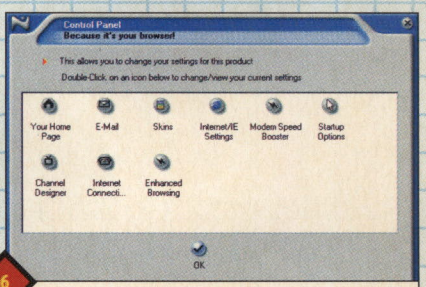
After the download, another alert box opens asking you if want to switch to the new skin. Click on the 'Yes' button and wait a few seconds while NeoPlanet rebuilds itself using the new Skin design



The new Skin completely changes the look of NeoPlanet, although everything in the browser works in exactly the same way as before



To change between different Skins in NeoPlanet, click on the Skins icon on the toolbar. The Skins menu appears where you can choose any of the Skins downloaded and stored in the NeoPlanet browser



If you select the Control Panel command in the View menu, you get access to all the major settings in NeoPlanet from one menu option. You can configure lots from here

Setting up multiple Internet accounts

OBJECTIVE
To set up multiple Internet accounts on a PC using Dial-Up Networking

TIMESCALE
90 mins

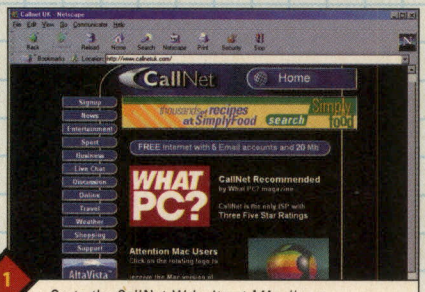
Setting up multiple Internet accounts can be a right nuisance, fraught with problems. **CLIVE PARKER** explains how to remedy the situation

IF you've been using the Net for a while, you're bound to have accidentally changed your default dial-up setting while installing another service provider's software.

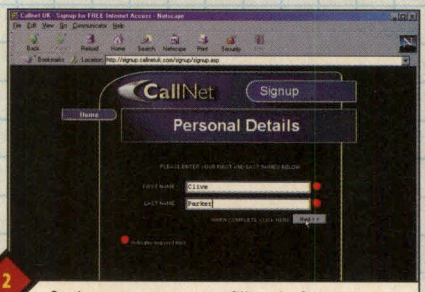
This happens because the installation software assumes that you are installing an Internet connection for the first time and takes priority over anything else you may have installed on your system. But it doesn't matter that much. Although your browser details may have changed, all of the original dial-up settings are still stored on your PC in the Dial-Up Networking folder. Open My Computer on the desktop and double-click on the Dial-Up Networking folder. You will be presented with one or more dial-up connections. You can also create new dial-up connections by using the Make New Connection wizard and settings gleaned from a service provider's Web site, or you can use a Web-based program on a Web site to create the new dial-up connection for you.

Either way, you can have as many connections as you like.

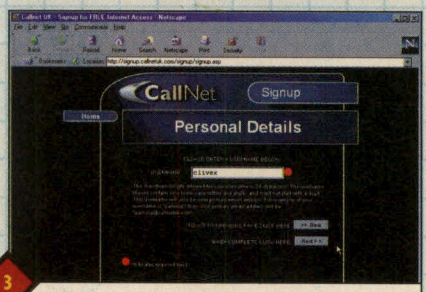
SETTING UP A CALLNET ACCOUNT FROM THE WEB SITE



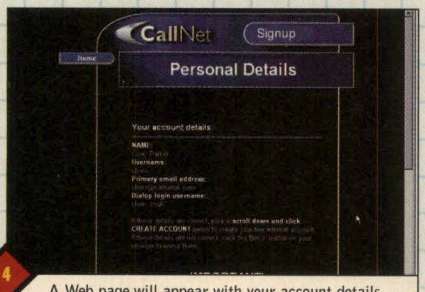
1 Go to the CallNet Web site at **http://www.callnetuk.com** and click on the 'Signup' icon. It's the first icon in the menu graphic on the left side of the page. There is also provision for Mac users



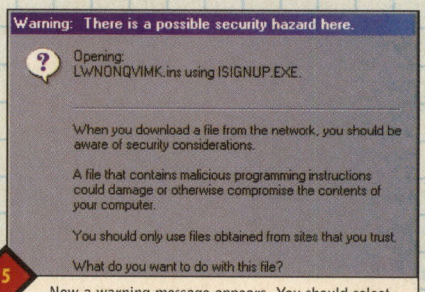
2 On the next page you start filling the first in a succession of online forms. Enter your name on the first page and click 'Next.' On the following pages you enter your sex, age and address details



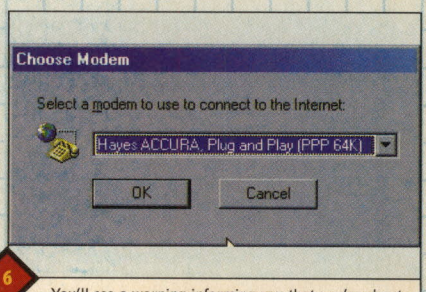
3 On this screen you enter your phone number, and on the one after you enter a security keyword. The next two pages are where you enter your username and password. Click 'Next' to continue



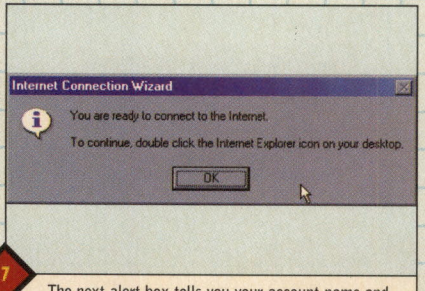
4 A Web page will appear with your account details. You should make a note of them or print out the page so you don't forget them. Scroll to the bottom of the page and click the 'Create Account' button



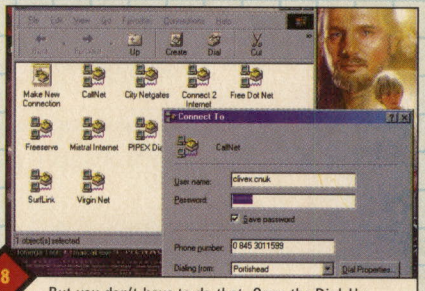
5 Now a warning message appears. You should select the 'Open It' option in Netscape Communicator or the 'Run From Current Location' option in Internet Explorer. Click the 'OK' button to set up the account



6 You'll see a warning informing you that you're about to change your Internet Settings. Click 'OK.' Now choose a modem. If you have more than one, select the one you are going to use and click 'OK'



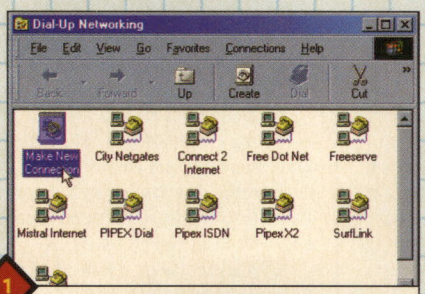
7 The next alert box tells you your account name and password for CallNet. Make a note of them and click 'OK.' The final alert box tells you to double-click on the Internet Explorer icon to connect. Click on 'OK'



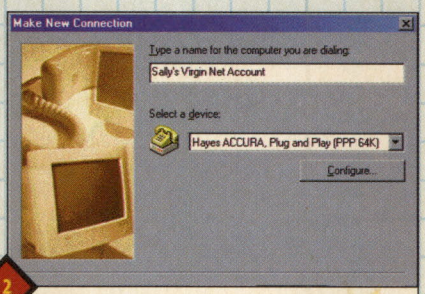
8 But you don't have to do that. Open the Dial-Up Networking folder and double-click on the CallNet connection icon. The usual dial-up connection dialogue appears and you're ready to connect

9 And here we are accessing the Yahoo! home page with our CallNet account. Now you know how easy it is to install another Internet account, you can do it until the cows come home!

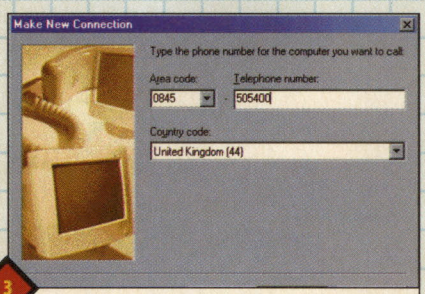
SETTING UP A NEW ACCOUNT MANUALLY



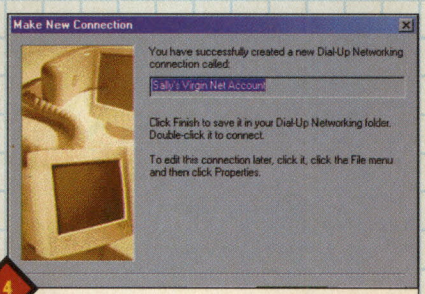
1 If you want to add an existing account to a PC with a different account on it, you have to set up the Dial-Up Networking connection. Open Dial-Up Networking and double-click on the 'Make New Connection' icon



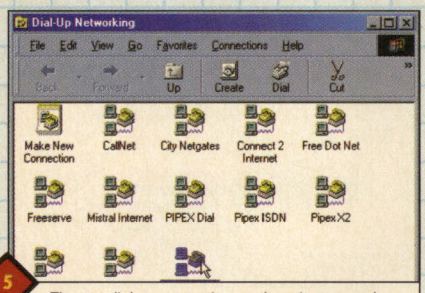
2 You already have all the details you need such as account name and password, so lets get started. In the first page of the wizard, enter the account name and select the modem to use



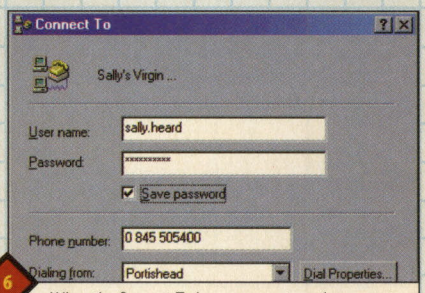
3 In the next screen you enter the area code and the telephone number of the service you are connecting to. Once you have entered the numbers, and ensured the country code is correct, click the 'Next' button



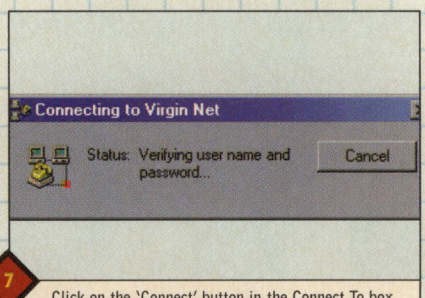
4 The final screen of the Make New Connection wizard simply confirms the name of the account. To complete the connection, click on the 'Finish' button



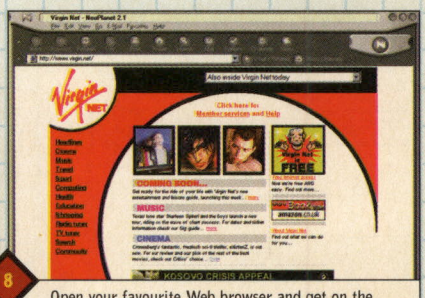
5 The new dial-up connection you have just created appears in the Dial-Up Networking window. To complete the setup, double-click on the new connection icon



6 When the Connect To box appears, type the account name in the 'User Name:' text field and the password in the 'Password:' text field. If you want to save the password, select the 'Save Password' box



7 Click on the 'Connect' button in the Connect To box to start a connection. After a few seconds, your modem dials and you log into the service using the new account. And that's all there is to it. Almost

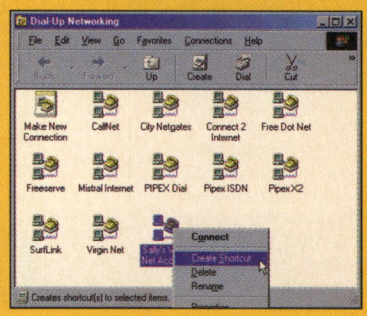


8 Open your favourite Web browser and get on the Web. You now have another connection running on your PC. You can repeat this process as many times as you like, as long as you know the account details

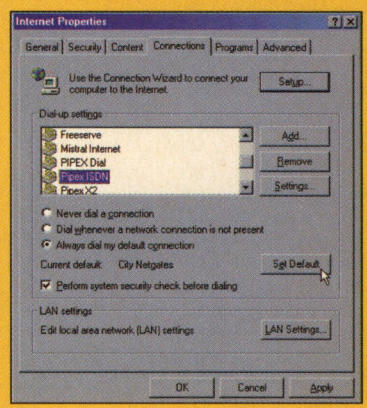
DESKTOP SHORTCUTS

DESIGNED TO MAKE YOUR LIFE EASIER

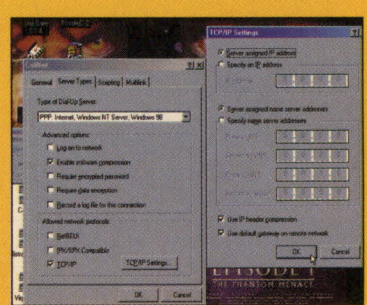
IF you double-click on the Internet Explorer icon on the desktop, or run any other Internet application, it's going to dial your default connection. If you want to use a different connection, you must connect to the Internet first. The easiest thing to do is to create a shortcut to your connection on the desktop. Go to Dial-Up Networking and right-click on a connection. Select 'Create Shortcut' from the pop-up menu and then click 'Yes' when you are asked to save it to the desktop. When you want to connect, double-click on the shortcut.



If you want to make a new connection your default, go to Control Panels and select 'Internet Options.' Click on the 'Connection' tab and select the connection you wish to make the default in the list. Now click on the 'Set Default' button to change the settings, then click on the 'OK' button.



With some dial-up connections, you may have to change some other settings such as the name server address and IP address. To change the settings for individual connections, right-click on the connection icon in Dial-Up Networking and select 'Properties.' Click on the Server Types tab and make sure that the NetBEUI and IPX/SPX Compatible options are not selected. To change IP addresses and name server addresses, click on the 'TCP/IP Settings...' button and enter the appropriate settings for your connection.



OBJECTIVE

To learn the menus and preferences of iCab, an excellent Web browser for the Apple Mac

TIMESCALE

60 mins

Hailing the iCab

As with the PC platform, there's not a lot of choice when it comes to browsers on the Apple Macintosh. **CLIVE PARKER** decides to take the iCab for a spin

YES, it's true. You no longer have to use Internet Explorer or Netscape Navigator to browse the Web on your Mac, using up valuable memory.

Instead, why not try iCab? It's a small and memory-efficient Web browser for the Mac developed in Germany. With a good eye for the market, the developers are developing an English language version alongside the German version. The latest version is Pre1.4, an almost finished pre-release.

iCab works in just the same way as any other Web browser. All of the familiar navigation icons are present in the traditional Netscape/Mosaic style toolbar, and you can use the program for all aspects of Internet use such as the Web, visiting FTP sites, collecting and sending email and reading Usenet newsgroups.

The program is easy to use, and even simpler to configure. The iCab preferences are laid out in almost exactly the same fashion as Netscape Communicator, so you shouldn't have any difficulties setting things up.

To help you, here's a look at where the main settings are.

Huh?!

IMAGE FILTERS

You'll find that iCab comes with an unusual feature called image filters. This is a feature that lets you control exactly where you can download images from the Web. The Image Filters pane, which can be accessed from the iCab Preferences, has two main options. We shall look at both in more detail below.

The first option in Image Filters is to restrict download by the URL. By clicking on the option, you will activate a scrolling window that has 12 lines.

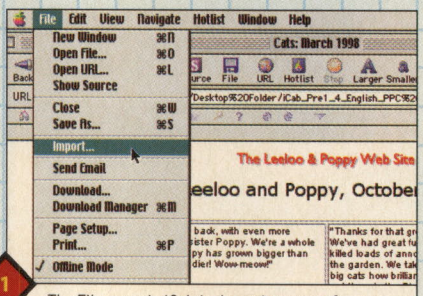
You can modify each of these 12 lines. In each line, you can choose several options. You can choose to filter by Server, Path, Filename or URL in the first pop-up menu. The second pop-up menu lets you choose between Is and Contains filters. In the last part of each line, you can type in the final criteria such as filenames, URLs and so on.

The second option in Image Filters is to filter the images by size. Strangely enough, you don't enter the file size in bytes, kilobytes or megabytes.

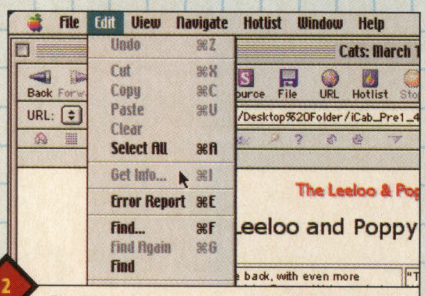
Instead, you enter the exact pixel dimensions of the files you don't want to download.

But what's the use of this, you may ask yourself, Well, it means that you can stop annoying banner ads popping up everywhere. The standard pixel size for a banner as is 468 pixels wide by 60 pixels high. Simply enter this setting into the filter, and you need never see a banner ad again. Smart stuff guys!

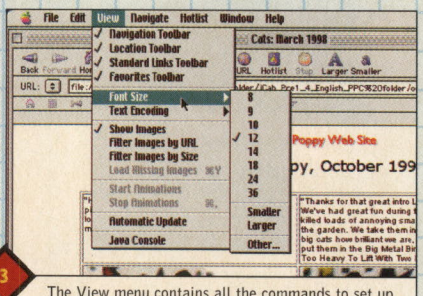
MINING THE MENUS



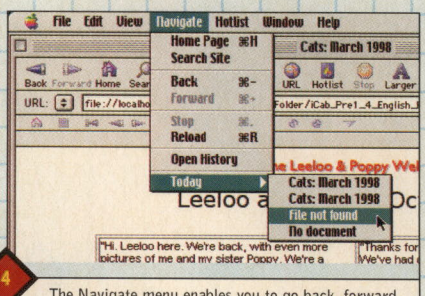
1 The File menu in iCab is the main means of navigation. You can use the commands to open a new browser window, open Web pages on your hard drive and the Net and to manage downloads



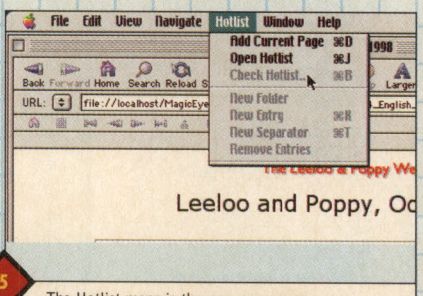
2 The Edit menu contains the usual Cut, Paste, Copy and Clear commands, the Find commands and the Preferences command. You can also list any errors encountered by the browser



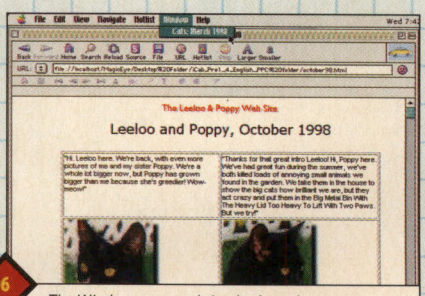
3 The View menu contains all the commands to set up the way the browser looks. You can toggle all of the main toolbars on and off, change the default font size and choose to filter images by URL or size



4 The Navigate menu enables you to go back, forward and reload pages. You can also start a search from here, open the History list and view the pages you've visited today

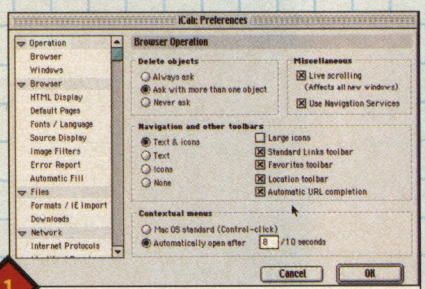


5 The Hotlist menu is the way you manage your bookmarks/favorites. You can add Web pages to the Hotlist, view the pages and easily add new folders and separators just by using the menu commands

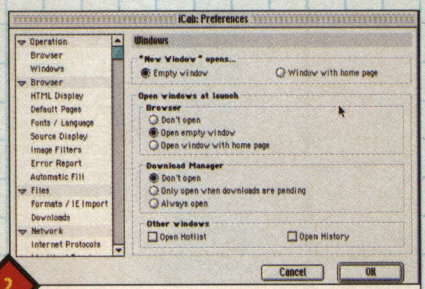


6 The Window command simply shows how many browser windows you have open and lets you switch between them. In this grab, you can see all the icons and toolbars present in iCab

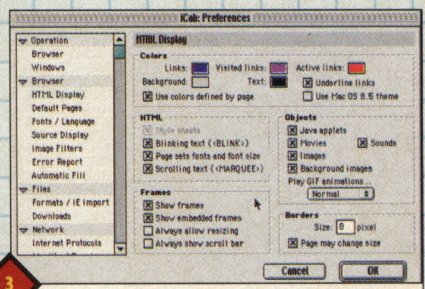
PREFERENCES FOR ICAB



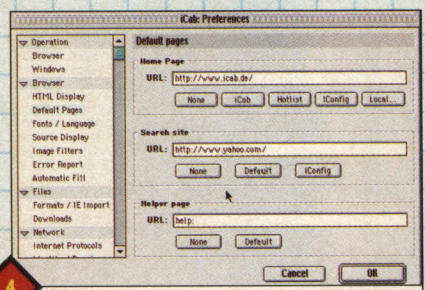
1 The Preferences command in the Edit menu lets you configure your browser. The Operation/Browser pane lets you define how the browser works, and you can set up the toolbars and control scrolling and menus



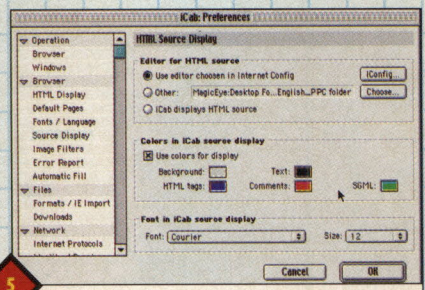
2 The Windows pane controls how your browser opens new windows and what happens when you launch iCab. You can also determine whether you want the Download Manager to run when you get Web files



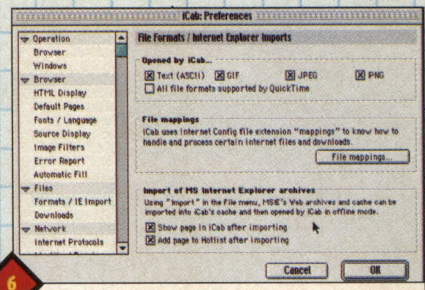
3 The HTML pane in the Preferences controls how Web pages look in the browser. You can define link colours, determine what applets and multimedia play, control how frames works and so on



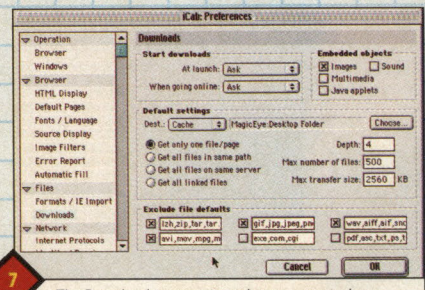
4 The Default Pages pane in Preferences enables you to set up your default home page, your default search engine and your default helper page



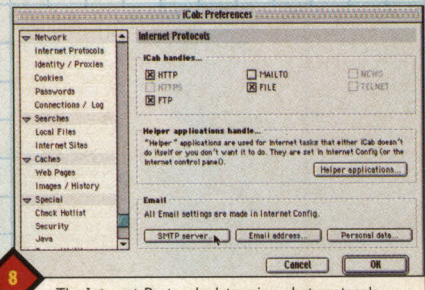
5 The Source Display pane determines how you will display and edit HTML pages. You can use Internet Config to choose the HTML editor, browse your hard drive or display source code in iCab itself



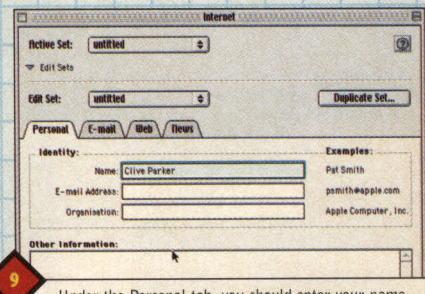
6 The Formats/IE Imports pane lets you set up what kind of image files are automatically opened. You can use File Mappings to decide what program to use to open other files such as windows BMP images



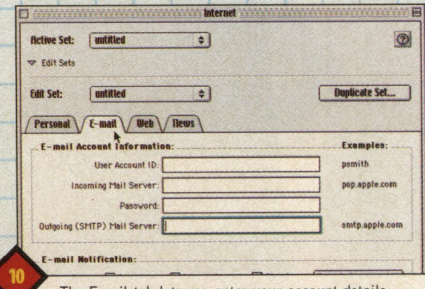
7 The Downloads pane sets up how you control your file downloads. You can determine which embedded objects are supported and set up your cache. You can also set a maximum file size for download



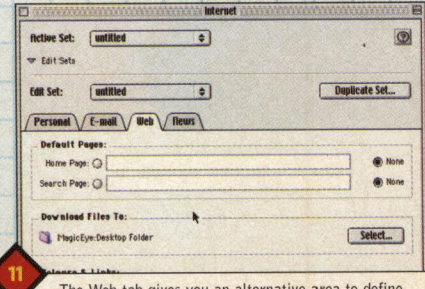
8 The Internet Protocols determine what protocols iCab supports. HTTP, FTP and Files are standard, but you can also deal with Mailto links on Web pages. The Email section lets you enter your account details



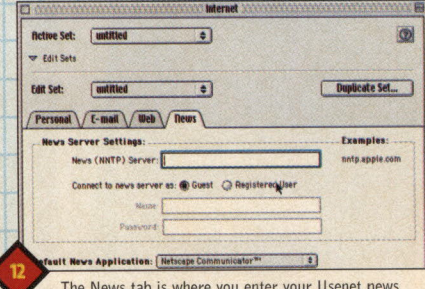
9 Under the Personal tab, you should enter your name, email address and organisation. You can also add other information and your email signature here



10 The Email tab lets you enter your account details. Your account name goes in the User Account ID box, your POP server, password and SMTP server goes into the next three boxes



11 The Web tab gives you an alternative area to define your default pages and your link colours for Web pages. You can also select your default Web browser from the pop-up menu



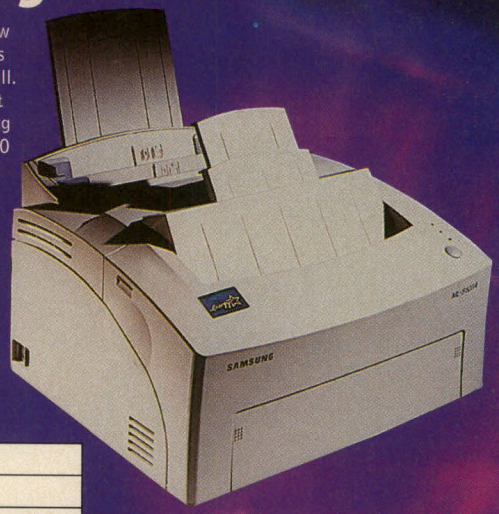
12 The News tab is where you enter your Usenet news server details. You can also determine which application you want to use for news reading

HARD

THE LATEST GOODIES, GADGETS

Prints charming

WHAT you want is a high-quality printer at a low price, right? So do we all, and now Samsung has come up with a printer that just might fit that bill. The ML5100A printer breaks away from current manufacturing methods of separating the imaging and toner components, and instead offers a 5,000 page single cartridge that makes toner changes quick and simple. The ML5100A is no work-shy fop, either – with its 6,000 page-per-month duty cycle, this printer is ideal for all but the most fervent tree-hater. The unit comes with a 150-sheet feeder as well as a single-sheet feeder for things such as envelopes and transparencies. It also comes with 4Mb of memory as standard, but this can be increased to 36Mb with memory upgrades. And that's not bad at all for an RRP of £249.



Product:	Samsung ML5100A
Price:	£249
Contact:	http://www.samsungelectronics.co.uk

Digital dream

THINGS have come a long way since the Box Brownie. The latest digital camera to catch our collective eye is the Fuji MX-2700. It's a compact little critter, yet offers an impressive image resolution of 1800 x 1200. The images produced by the camera weigh in at over 6Mb meaning your snaps will be sharp, clear, and colourful. Top stuff for a camera that's only 4" high, but wait, there's more. The MX-2700 has a new RGB filter, which improves skin tones. It also has two powerful RISC processors which, we're told, means the camera operates at around three times the normal speed of the industry standard. And for those of us who are less than careful with our cameras, you'll be pleased to know that the MX-2700 comes with an improved lens cover to protect it from damage.

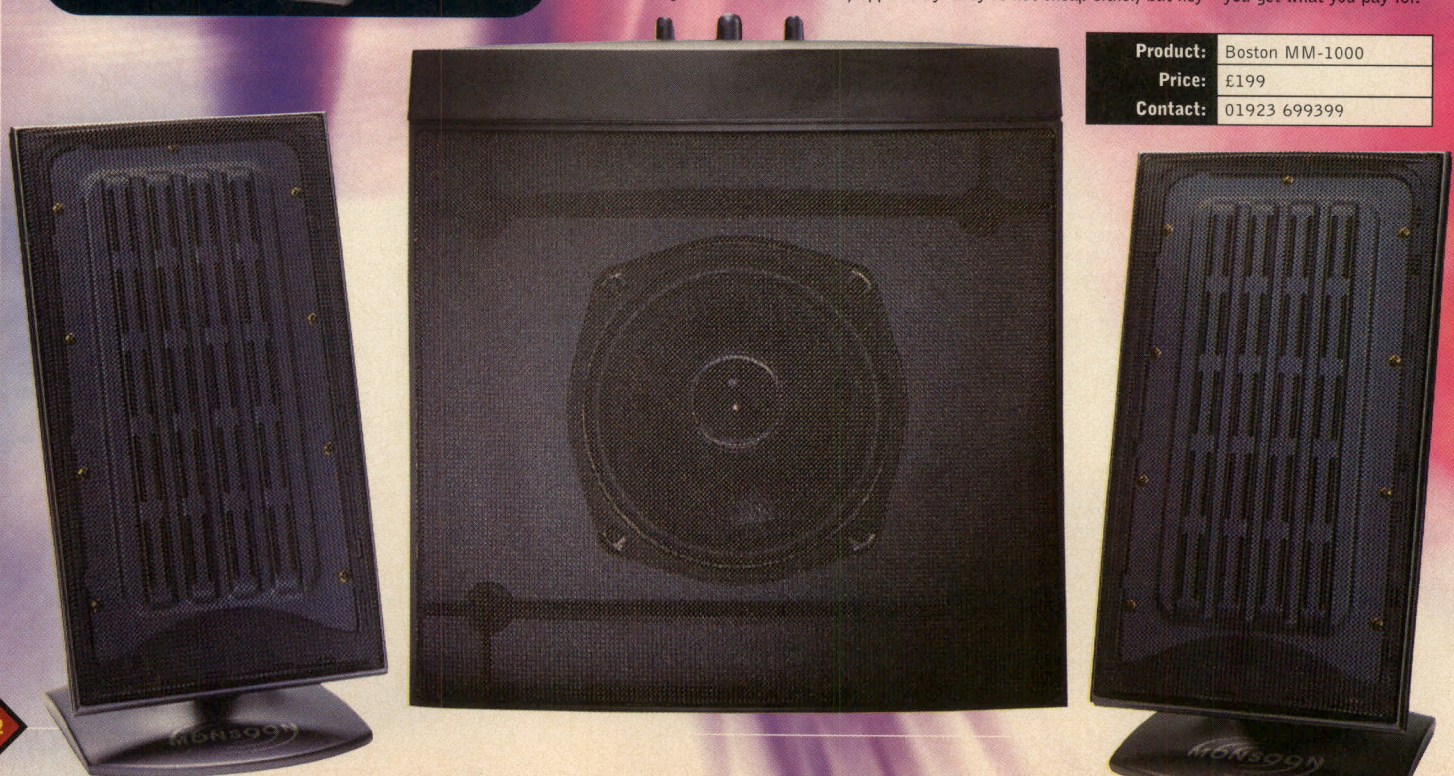
The rechargeable battery can last up to 250 shots before it needs to be recharged, and though no price has yet been set, it's likely to be under £700.

Product:	Fuji MX-2700
Price:	TBC
Contact:	http://www.fujifilm.co.uk/di

Sounds good...

WHETHER it's bloodcurdling Net gaming screams you're into or the more subtle sounds of an online jazz radio station, you need better than a pair of tinny speakers that emit sounds about as bass-rich as a mosquito. Instead, splash out a bit of extra cash for the Boston MM-1000 speakers. Admittedly, they look gorgeous, but it's the sound that blows you away. Boston, best known for car speakers, has developed a new technology which helps to stop the left and right audio channels from crossing, and give a richer, clearer sound. This is in contrast to traditional speakers, which sometimes deliver a 'thick' sound, since the left and right audio channels cross each other as they're designed to fill a room with sound. It's the 'Planar Focus' technology we've got to thank Boston for, apparently. They're not cheap either, but hey – you get what you pay for.

Product:	Boston MM-1000
Price:	£199
Contact:	01923 699399



AND GIZMOS WIRED

Lost and found

IT'S all very well spending loads of time outdoors, but what happens when you've gone a couple of fields too far and forgotten your way back? Well, if you've got either the GPS 315 or the GPS 320, you'll have a better chance than you would guessing by the direction of the sun. These are satellite navigation units and contain a built-in database to let walkers, boaters, pilots, cyclists and motorists relate their position and location to the nearest city. If used with a PC, you can transfer your saved routes or plan a trip before you set off. An optional extra is the DataSend CD-ROM which pinpoints thousands of points of interest around the world. In case you get really lost there's a 12-parallel channel receiver along with a sensitive quadrifilar antenna to help you regain your bearings. The units have a high-resolution graphical display that shows direction, route travelled, distance to destination and other navigational information. There's also a backlit display for you're your night-time exploits. Both units can store up to 500 landmarks, and the two AA batteries provide up to 15 hours continuous operation. The GPS 315 costs £145 while the GPS 320 is £179. Both prices exclude VAT.

For more information, phone **01722 410800**.

Product:	GPS 315 and 320
Price:	£145/£179
Contact:	01722 410800

Lean screen

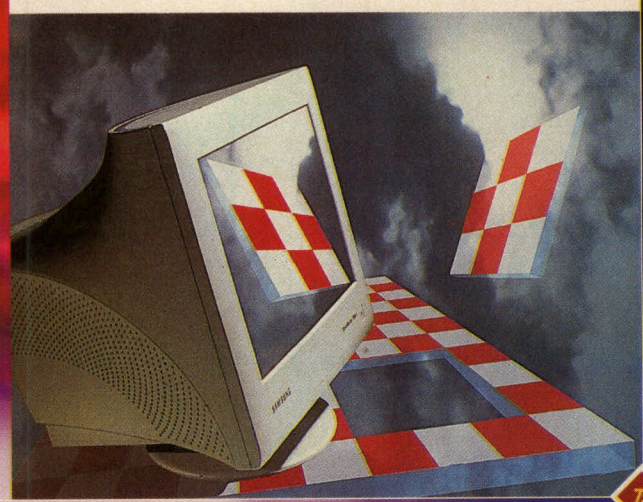
FLAT is the future, according to Samsung's new CRT monitors. The SyncMaster IFT range have completely flat screens, which means they can give you the sharpest, brightest images – and they'll be completely free from distortion. The monitors use the company's Dynaflat tube, which means that they can transmit a display with 50 per cent more light than traditional tubes. They're available in 17-inch and 19-inch versions, and both have Samsung's Smart III screen technology. The Smart III delivers a broader spectrum of colours, extend the colour gamut by 15 per cent and offer a better swivel margin than any dark-tint panel CDT. The units are also fitted with a USB port making it simple to plug in extra peripherals. The 17-inch SyncMaster 700IFT has an RRP of £379, while the 19-inch 900IFT should cost around £489.

Product:	SyncMaster IFT monitors
Price:	£379/£489
Contact:	0870 107 1799

Multi-tasker

IS it a copier? Is it a colour printer? Is it a fax machine? No, it's the Xerox WorkCentre 155c and it does all three of these things. This nifty product could prove very useful for home or small office use where you don't have the desk space for several different units. The WorkCentre 155c is a fully featured fax and copier, with a fax transmission speed of 15 seconds per page. If you decide to buy the optional colour print head, it can also become a colour printer when its plugged into your PC. Once plugged in, you can also use the device as a PC scanner and fax. Unfortunately, it still can't make the tea, though.

Product:	Xerox WorkCentre 155c
Price:	£293
Contact:	http://www.xerox.co.uk



SELLING SEX

Is selling sex in UK cyberspace a solid proposition or a limp idea? JO CHIPCHASE enters the world of Net smut...

The online sex industry is worth £4-5 billion a year worldwide and during 1998, Net pornography accounted for 11 per cent of e-commerce. Add to this the fact that 30 million individuals a day log on to adult Web sites and it becomes clear that porn is, and always has been, a thriving mainstay of the Internet economy. For those with the entrepreneurial tendencies, the knowledge and the inclination, there is big money to be made from selling sex on the Net.

The majority of adult revenue is earned by large corporate Web sites and through reseller programmes that channel people on to these sites. The slick and seedy CyberErotica is amongst the Net's top three sex sites, and earns $800K a month. It's not alone in its profit-making achievements. Persian Kitty – a directory of sex sites owned by 36-year-old Washington-based Bev Mansfield, who has no previous background in the sex industry – earns in excess of $1 million a year. Another female owned venture, KaysPlace, makes sizeable profits and attracts 30,000 visitors by staging sex shows via live Webcams. HotSex, which caters for a diverse range of sexual tastes and provides some interesting sample pics, earns around $40,000 a month. In many cases, the person who owns the site does little of the work – they simply invest the money and reap the rewards.

Hard or soft?

In the face of high profit margins, has the UK porn industry taken enthusiastically to the Net? Al Needham, a freelance writer who has worked extensively in the UK 'top shelf' industry – in both traditional and online media – believes it has been reticent in its approach. "The UK porn barons got very excited about the Internet in the mid-90s, as they made ridiculous fortunes from phonelines in the 80s. They assumed money would rain down from the skies, but UK Web smut hasn't done all that

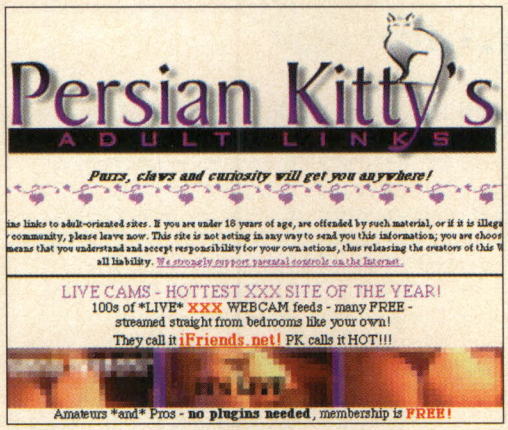
Casting Couch: What can I hang this dress on, please?

well – mainly because the images are too softcore and Brits are still nervous about using credit cards on the Net." Needham worked for Northern & Shell, the industry player behind *Penthouse*, Fantasy Channel and 25 adult magazines. When the company expressed an interest in having an Internet presence, he volunteered for the project. "I launched numerous sites, and plenty of first cuts for projects that never got off the ground. The chairman and the board had no idea about the Net. I remember one meeting where we demonstrated a dummy Web site. The chairman asked 'how easy would it be to steal images off the page?' When I dragged and dropped a picture onto the desktop, their mouths hung open like drawbridges."

According to Needham, the UK porn barons felt outdone by sex sites in the US and Holland. "British sites have their hands tied when it comes to competing with more permissive countries. When people look for porn on the Net, they want hardcore images, and we could only use images from magazines, so we couldn't compete. We decided to go for a traditional saucy Brit Porn approach, with tons of humour – we did a porn version of *Take A Break* and had a selection of gusset shots called 'Adam And The Pants.' After six months, the chairman decided he'd rather spend £2 million on photos of Michael Jackson's baby than keep the new media department going, so we were out."

Virtual Soho

Paul Raymond Organisation (PRO) is best known for publishing successful top shelf magazines and operating the Raymond Revue bar in Soho. Since going live during October 1998 with it's 'Virtual Soho' site – which features a diet of 'softcore' content – PRO has attracted 15,000 paid-up members. All pages on the



Fat cat: Persian Kitty earns over $900,000 a year

site are rendered in 3D graphics, depicting various Soho scenes. The sleazy element is afforded by a large-breasted girl on the home page and various models – with a strange predilection for frilly, white underwear – who appear throughout the site. Inside, you'll find a virtual cinema, escort dating agency, peepshow, casino (anyone for strip poker?) and the Superia Supplies sex shop, but "to enter the naughtiest parts of Soho" you'll need "a Soho gold card to get inside."

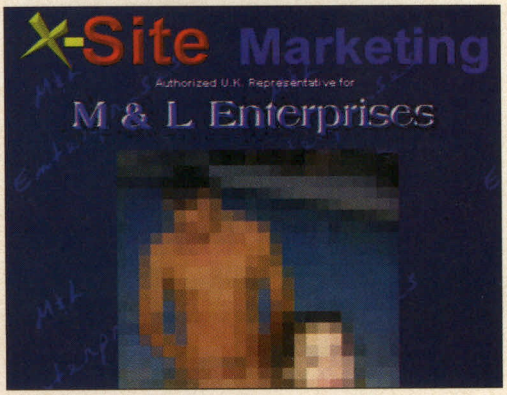
"Virtual Soho is one of the very few UK sex sites that adheres to the Obscene Publications Act. We are going by the rule book. The content on the site reflects the same editorial content as our magazines, more or less as it appears on the shelves. We don't want to be the first online test case for the Act, and will stick within the bounds of the law," says Danny King, sub-editor of PRO's *Club International* publication.

Sarah Miles, director of Diva-Net, the Web development agency that created 'Virtual Soho,' emphasises the need to provide quality, interactive entertainment. Diva-Net specialises in the adult sector, and has created sites for some 45 industry clients. She says, "The most important thing – especially as PRO titles have been selling on the street for a long time and have an established brand name – is quality content, rather than hard material. Hard content will not be a big issue in the future. People want interactivity and connection with the material they're viewing. The PRO site is closed entertainment, where you can interact in a titillating way."

'Titillating' content on 'Virtual Soho' includes live Webcams, which run 12-hours-a-day, seven days a week. "The live cams are the most popular content on the site. Members can talk to the girls on the phone using a call booking process which is unique to the PRO site. The girls call back and can talk to up to seven guys at once. The cams will be expanding to feature 24-hour live shows and there'll be guest spots from models who appear in PRO's publications," says Sarah.

Rogue porn sites **debit** users' cards despite **offering** a trial, and even **swap** card numbers **with other providers**

Needham points out that there is a huge difference between Web porn and mainstream porn. "The target audience on the Net is much more sophisticated and harder to exploit. As people become more Net-savvy, they realise they don't have to shell out for porn when there's so much free content about. After all, if you bought *Mayfair* off the top shelf at the corner shop and weren't satisfied with it, you can't demand your money back." He believes people who would not dream of buying a porn mag in a shop are comfortable looking at the most extreme images on the Internet, which makes for a wide UK audience. "The fact that Paul Raymond Organisation, which is very astute businesswise, is now buying into the Internet is a sure sign that money is to be made."



We didn't do this at Cable & Wireless!

ARE YOU X-SITED?

SAUCY HOSTS

ALTHOUGH selling sex online is a lucrative business, adult Webmasters can't obtain hosting services as easily as general Internet users. They risk incurring the wrath of commercial ISPs, because of their high bandwidth usage and (possibly illegal) sexual content. Many sex sites use an adult-oriented hosting and development service – which is where companies such as Oldham-based X-Site Marketing (**http://www.xxxprofits.com**) come in.

X-Site invites clients to invest in their own adult Web site for a low set-up fee, and takes care of online promotion, marketing and e-commerce, in return for a 33 per cent cut of the profits. Lee Ali, Director of the company, who previously worked in sales and marketing at Cable & Wireless, says, "We have 50-100K visitors a month per site. We specialise in amateur, gay, lesbian and (legal) teenage content – but steer clear of child porn, bestiality, incest and celebrity sex."

Ali warns newcomers against falling victim to industry rip-offs: "People have to be wary and look at the set-up cost, what they're actually getting, what their involvement is and how the marketing is being done. Some companies say they are taking a 50 per cent share of profits – but the clients haven't seen any cash.

Others are charging £3,000 for sites that contain only links. Someone I know spent £15K on a site and is getting only 20 hits a day, because no marketing spend was allocated. Marketing is all important."

Sweet T hopes his amateurs will give you a "T-Boner"

There's **no such thing** as a free lunch **and** there's no such thing **a free porn site,** either

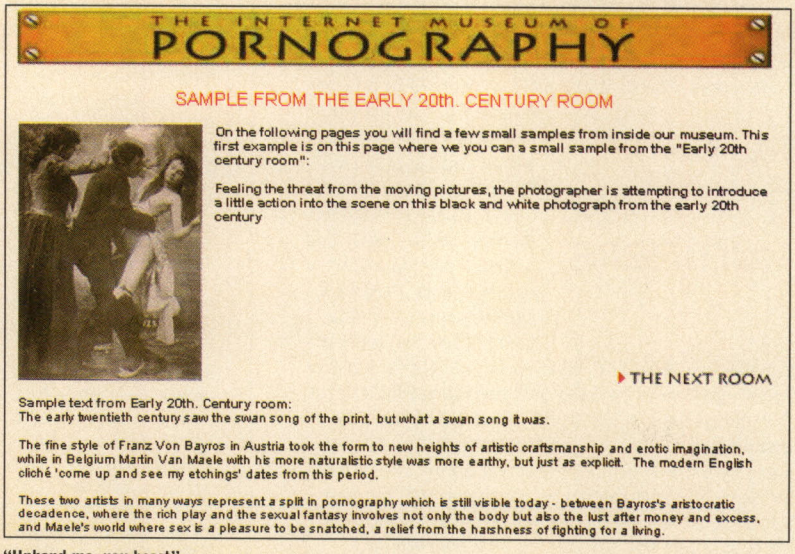
Sex scams

Cams are undoubtedly a lucrative means of providing sex content on the Net. However, Sarah points out that some UK cam sites are experiencing problems with their payment systems. "They're not providing sufficient information about the free access period expiring, and people don't realise that if they fail to cancel the account, their cards will be debited."

But, it's not only cam sites that can hit users with dodgy billing practises. According to CNET (http://www.cnet.com), rogue porn sites debit users' cards despite offering a "free month" and even swap card numbers with other providers, who debit them without permission.

There are also reports of certain sites engaging in a telephone call scam, which involved persuading visitors to download an EXE file. When executed, the file accessed the user's modem and made a long distance telephone call, which later appeared on their bill. There's no such thing as a free lunch and, as a general rule of thumb, there's no such thing a free porn site, either. According to Rick Muenyong of the YNOT Adult Network, 'free' porn sites comprise between 70 and 80 percent of adult material on the Web. They are used as bait for pay sites, and make money only when a user visits an advertiser's site. To increase click-through rates to the advertiser's sites, they will employ sneaky tricks, such as false promises of "free XXX pics" when you click on a banner or link, and multiple pop-up windows that won't pop off when you try to depart.

"The click-through market is a wild goose chase. This only happens in the sex industry as the providers believe 'people will think the content is naughty and never complain.' Click-through sites are very lucrative at the moment, but someone must be providing content somewhere and losing money. Click-through sites will eventually fall through, as Net users increasingly demand quality content," says Sarah Miles.


THE INTERNET MUSEUM OF PORNOGRAPHY

SAMPLE FROM THE EARLY 20th. CENTURY ROOM

On the following pages you will find a few small samples from inside our museum. This first example is on this page where we you can a small sample from the "Early 20th century room":

Feeling the threat from the moving pictures, the photographer is attempting to introduce a little action into the scene on this black and white photograph from the early 20th century

THE NEXT ROOM

Sample text from Early 20th. Century room:
The early twentieth century saw the swan song of the print, but what a swan song it was.

The fine style of Franz Von Bayros in Austria took the form to new heights of artistic craftsmanship and erotic imagination, while in Belgium Martin Van Maele with his more naturalistic style was more earthy, but just as explicit. The modern English cliché 'come up and see my etchings' dates from this period.

These two artists in many ways represent a split in pornography which is still visible today - between Bayros's aristocratic decadence, where the rich play and the sexual fantasy involves not only the body but also the lust after money and excess, and Maele's world where sex is a pleasure to be snatched, a relief from the harshness of fighting for a living.

"Unhand me, you beast"

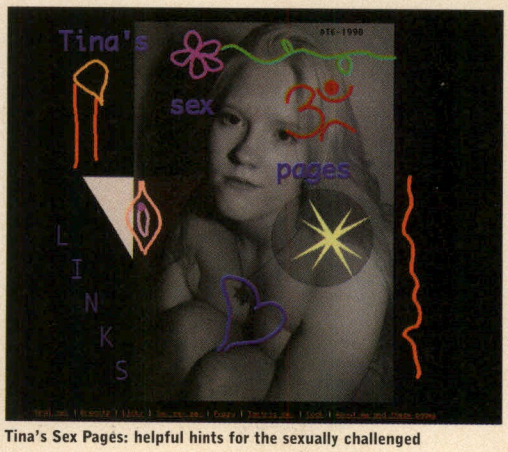
Corruption and depravity

To avoid possible prosecution, sex site providers must be aware of the legal implications of the content they place online. As is the case with film, television and written literature, content on Web sites is governed by the Obscene Publications Act 1969, which is enforced by the Home Office. However, there has not been a test case against a sex content provider in the UK to date. Content is deemed illegal if it would "corrupt and deprave a reasonable person" – in other words, a juror. Steve Park, spokesperson for the Home Office, explains: "If material on the Internet is in itself obscene, it would fall within the Obscene Publications Act, which covers material held within a computer,

Tasteless tack

The worst features found on adult sites

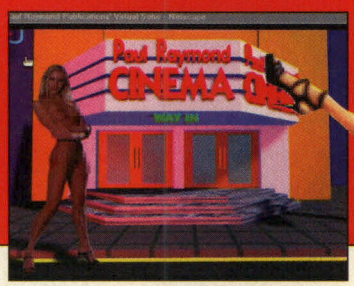
- Stars, black stripes or other obscuring items over rude bits.
- Rude bits used as icons.
- Neon text and long, scrolling home pages.
- Silicon boobs.
- Drunk amateur lesbians kissing each other badly.
- Teens who appear to be around 30.
- Click-through banner ads leading you site-to-site, with no (in)decent content.
- JavaScript pop-up windows that won't go away and CGI scripts that keep opening additional sites.
- Drugged-up models who look as if they're too out of it to be into it.
- Free sites that immediately ask for your credit card details.
- Pics that look as if they've been taken out of general top shelf mags or the *Sunday Sport*.
- The fact that women have to visit gay sites if they want to see naked men that don't look as if they've just escaped from *Planet of the Apes*.
- Welcome tunes and greetings that alert your entire household as to the nature of the site you're visiting.



Tina's Sex Pages: helpful hints for the sexually challenged

Soho scenes... from the relative safety of your PC

"Has anyone seen my coat?"



"...or are you just pleased to see me?"

Hotsex has some, erm, interesting sample pics

defined as 'electronic images.' However, there are no firm guidelines as to what is obscene – it is left to a jury to decide. The Internet is a worldwide mechanism for receiving information. The Obscene Publications Act relates to possession, and some case law stipulates that images held on a screen count as possession."

Lee Ali of X-Site Marketing advocates getting round the Act by running UK sex sites via servers in the US. "The majority of sites are hosted in the States. You can't have sexual material hosted in the UK. The position is not clear if you have material hosted abroad, because it is under that country's jurisdiction."

Sarah Miles believes there will be a clampdown on illegal material in UK cyberspace, and is wary of using US servers. "There appears to be less UK adult content because of the 'grey area' regarding site location. UK providers can give the appearance of being US-based by using a .com domain. However, if you put US-strength content on a .com domain and advertise the site in the UK, you're likely to run into trouble."

Legal eagles

Roger Dubar, a lawyer advising on Internet issues, agrees that UK-based users of .com domains could be prosecuted under UK obscenity laws. "It would be extremely difficult to run a Web service from the UK on US servers without having some 'unlawful' content held on computers in this country."

So why is the situation different in the States? The answer lies largely with the First Amendment of the US constitution, which relates to free speech. "The US constitution's provisions on freedom of speech make it more difficult for the US federal and state governments to regulate material – but of course they still try," says Dubar. During 1996, the US government attempted to amend the Communications Decency Act, to restrict access by children to "patently offensive depictions of sexual or excretory activities," including material on the Internet. The amendment was later thrown out as unconstitutional.

The US government has tried again with a weaker new law, dubbed 'CDA II,' and adult check or credit card access systems has partly been driven by moves to comply with this. In the meantime, US sex site providers find themselves benefiting from a more lenient approach than their UK counterparts. Censorship aside, adult Webmasters must be aware of copyright implications. During 1997, the Association for the Protection of Internet Copyright (APIC), aka the Web Posse, started policing adult material. The group, consisting mostly of photographers and copyright holders, sent threatening letters to Webmasters and pressured ISPs to remove any offending sites from their servers.

Do it yourself

To reap profits from the online sex industry, UK content providers need to take a flexible attitude. Al

"We had a selection of gusset shots called Adam And The Pants"

Needham explains: "For a British site to succeed, it has to approach it as an entirely new media, and not just the electronic version of a magazine. Those who are looking to make some cash from a pornographic Web site shouldn't bother unless they have access to lots of images that they legally own. There are so many commercial porn sites out there, it's not worth the effort. The best thing to do is start a small site, bomb the newsgroups as to its existence, keep it fresh, and then maybe start charging for access to a load of extra images. Even better, devote an entire site to one model, and then get her to participate."

In the meantime, UK adult Webmasters must brace themselves for a possible legal clampdown. Sarah Miles comments: "The Net is a loose cannon at the moment. You don't even want to link to sites where you can't control the content." As with all things related to sex, the overriding message is clear: do it well, don't get too out of hand, and take care!

Big boys – Cybererotica is amongst the Net's top three sex sites

SITESEER

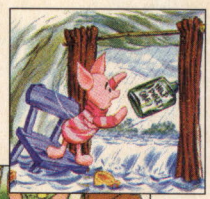
Children's playground

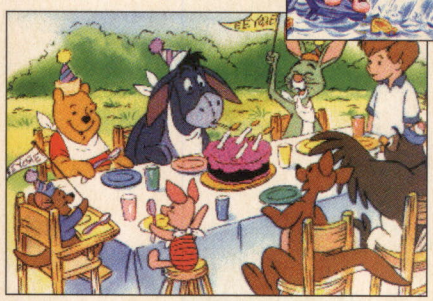
There's plenty on the Web to keep the children amused. JO COLE looks at the best sites

Winnie the Pooh Highlights

http://disney.go.com/StarWatch/WinnieThePooh.html

An offshoot of the main Disney site (http://www.disney.com) and the best place to come for all things related to that loveable Pooh Bear. Not only can you shop till you drop your honey pot, but you can also read some of Pooh's adventures, send a postcard, play some games, and groove on down with the Hundred Acre Wood Gang. And for the young software boffins out there, you can also get information about a Pooh CD-ROM and how you can turn your printer into a Pooh print studio. It's a little bit of magic.

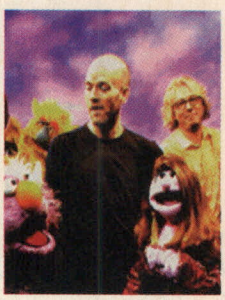


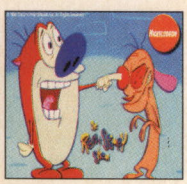


Nickelodeon

http://www.nick.com

Nickelodeon provides some great kids' programmes, including *Ren and Stimpy*, *Doug* and those Hollywood stars, the *Rugrats*. And along with all great programmes, Nickelodeon has also produced a great Web site that is easy to navigate and full of information. Not only is there substantial coverage of all the programmes on the Nickelodeon channel, but there's also gossip from behind the scenes, and tips for staying safe online.





Jelly Belly

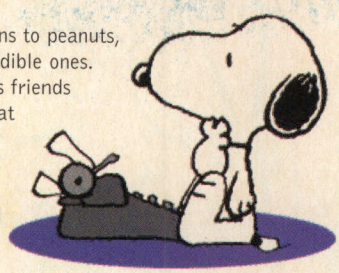
http://www.jellybelly.com

Mmm, sweets. The staple of any childhood, Jelly Bellys are the ambrosia of confectionery. Ridiculously expensive, but worth every penny, these gourmet jelly beans have as many flavours as you've had hot dinners. And the Jelly Belly Web site is just as fruitful as the beans. For your tastebud delight, there's a Menu and Recipes section, where you can get ideas for what combinations to guzzle your sweets in. Then there's an art gallery of pictures made up of loads of Jelly Bellys, a Q&A section and a factory tour of where the lovely sweets are made.

The Official Peanuts Home Page

http://www.unitedmedia.com/comics/peanuts

From jelly beans to peanuts, well, the non-edible ones. Snoopy and his friends make up a great comic strip, managing to appeal to both youngsters and adults. If you're a fan of the black and white dog, you should definitely visit this site. Along with the expected archive of comic strips, you can get information about each of the characters, a profile of the artist and the history behind the cartoons. There's also a gift shop where you can buy all manner of Snoopy goodies and a fun and games section which will have you chuckling with glee.

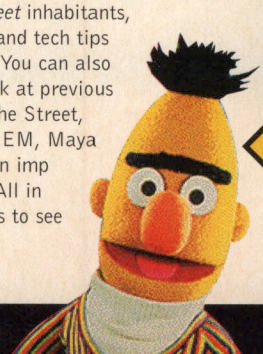


CTW Family Workshop

http://www.ctw.org/home/content/0,2946,,FF.html

Hooray for *Sesame Street*. It's the program that lets you skive off school, and still manage to learn stuff. Whether it's counting up to 12 thanks to a pinball machine, or learning the meaning of sharing thanks to Bert and Ernie, it has it all.

And this site is just as jam-packed. For the parents, there's tips from other parents, and there's a special Play and Learn section filled with games and stories. There's profiles on each of the *Sesame Street* inhabitants, along with site reviews and tech tips from Elmo. You can also have a look at previous guests to the Street, including REM, Maya Angelou and that Latin imp Gloria Estefan. All in all, there's loads to see and do.



Entertainment sites

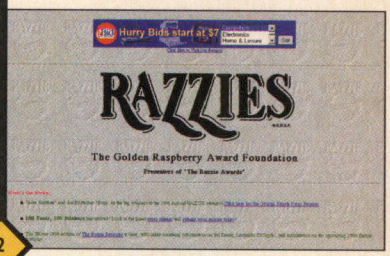
LET THE WEB ENTERTAIN YOU WITH GOSSIP, FILM NEWS, MUSIC AND MUCH MORE

1

Film Scouts

http://www.filmscouts.com/

Aiming to bring you the best in films, the site captures the atmosphere of the cinema and has plenty of news and gossip to boot

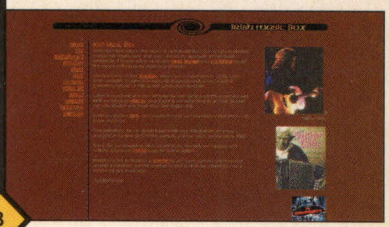


2

The Golden Raspberry Award Foundation

http://www.razzies.com/

This foundation, affectionately known as the Razzies, lets you make a big ya boo to all those hideous films thrust upon unsuspecting audiences

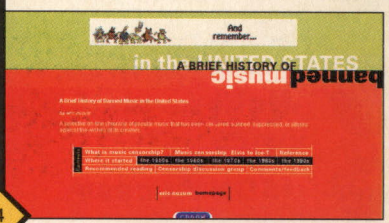


3

Irish Music Box Online Magazine

http://www.dojo.ie/musicbox/

Everyone wants a bit of Irish in them (tee hee) so start with getting used to the diddley diddley music



4

Banned Music in the United States

http://ericnuzum.com/banned/

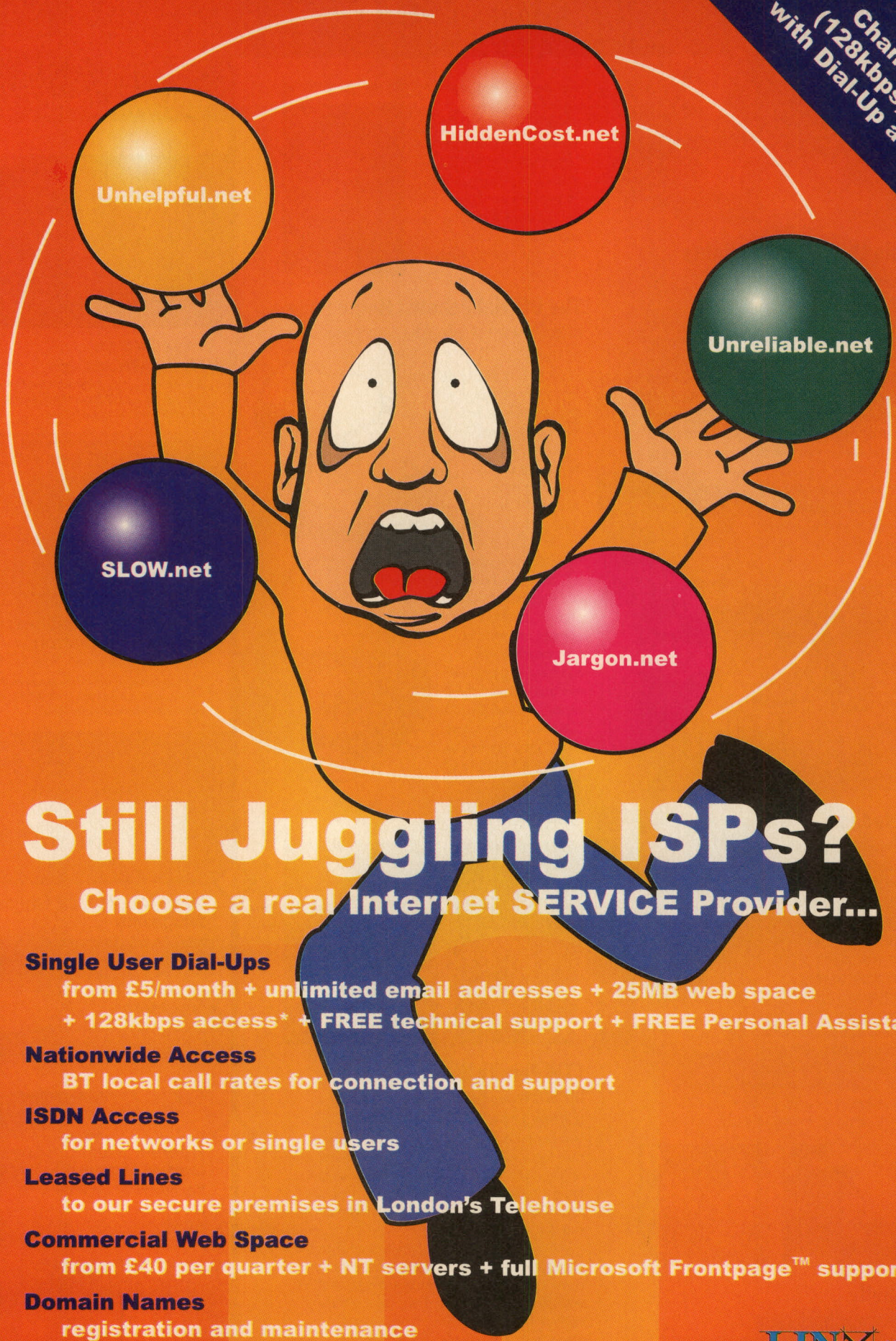
A huge chronicle of music that has been banned or altered to make it 'acceptable.' And this doesn't just include gangsta rappas – Elvis the Pelvis was banned

5

Victor Lewis-Smith

http://www.lewis-smith.com/

Loads of funnies from one of the most mischievous individuals around. One of the best bits is the uncensored phone calls the BBC wouldn't transmit



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Zeeks

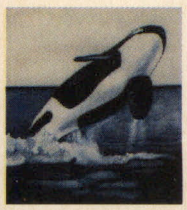
http://www.zeeks.com/home.asp

A Zeek is a creature that inhabits the phone line where your modem is connected. They talk a garbled language, but are like a playful pet. Your hosts to Zeek culture are Nikki, Tamara, Margo, Matt and Andy, who guide you around the site, which is bursting with information. Each character has their own section and there's plenty to do and learn. As well as the expected games, there's tech advice and some fun facts. You can even pour out your adolescent heart to Margo. And if you get caught up with Zeek fever, you can get your free email address and be tied with the Web site forever.

SeaWorld/Busch Gardens Animal Information Database

http://www.seaworld.org/

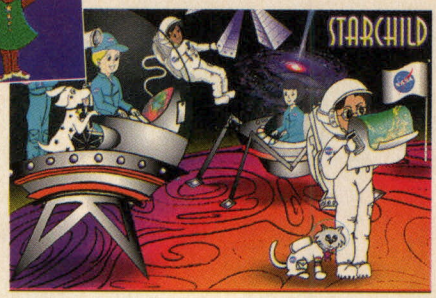
There's a little tag at the bottom of this Web site that says "Save endangered species, Keep the world alive." Presumably this is by piling them all into a tank and making them jump through hoops to soak the front row audience. But politics aside, anyone that visits Florida inevitably ends up in SeaWorld or Busch Gardens, the former inhabited by all manner of aquatic creatures, the latter by land lovers. There's loads of information on the site, including educational resources and programs. There's also plenty of facts about the animals you can find in either parks, dominated by Shamu, even though the original Shamu died years ago.



StarChild

http://starchild.gsfc.nasa.gov/docs/StarChild/

A StarChild is an alien, who doesn't know that they're an alien, who is sent to this Earth to do good and make people smile. Presumably NASA chose this name to try to get away from their techy, 'Houston, we have a problem'



image, and rope the kids in. For this site is subtitled 'A Learning Center for Young Astronomers' and introduces children to the wonder and beauty of the solar system. There's two levels to the site, so beginners won't be dumbfounded with new ideas. Get the children looking towards the skies – if you can get them away from the TV.

A Bug's Life

http://www.disney.co.uk/DisneyMovies/ABugsLife/

A Bug's Life stomped all over *Antz* and took a massive £4.2 million in it's first opening weekend, which is nothing to be sneezed at, otherwise you risk blowing the stars of the film over. As is to be expected from a Disney site, there's spangley bits all over the place that will delight and amuse any fans of the film. There's bug cards to send, film info to read and some great outtakes that have never been seen before. Visit this site and maybe you'll think twice before you squash that bug.

ABC Toon Center

http://www.abctooncenter.com/journal.htm

Join Hoot the owl and Kat the, erm, cat for games and puzzles and loads and loads of cartoons. Hoot will entertain you with his storytelling, all set at the 'Friendship Tree.' The tales on offer include a story of how he and Kat became best friends, and what they got up to on their Spring Break on Myrtle Beach. Hoot also turns his hand at poetry, with a splendid rhyming section. Kat is in charge of games, one of them involving you helping him out of the woods. There's also a section where you can learn how to draw cartoons, and you can carve your name on the worldwide friendship tree. Lots of goody goody fun.

Kids' sites

SITES GUARANTEED TO AMUSE, EDUCATE AND ENCHANT THE TINY PEOPLE AMONGST US

1

GusTown

http://www.gustown.com

You can learn and play games with Gus and the CyberBuds in their town of fun. Also, you can join the CyberBud club

2

Billy Bear's Playground

http://www.billybear4kids.com

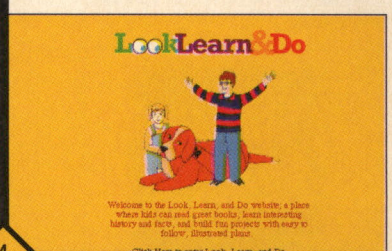
Come to this site and play with Billy Bear and all of his chums. You can even create your own storybook on the site

3

Ikon Kids

http://www.ikonkids.com

With the onus placed squarely on the digital age, Ikon Kids is a place for children to share their thoughts about life, the universe and everything

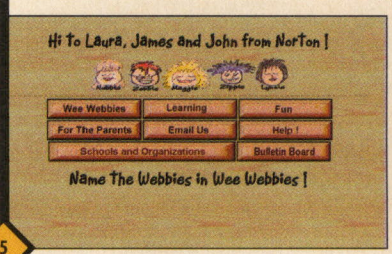


4

Look, Learn and Do

http://www.looklearnanddo.com

The title of this site is pretty self-explanatory – you look at the site, learn from it, and then do stuff. Fancy making a blimp?



5

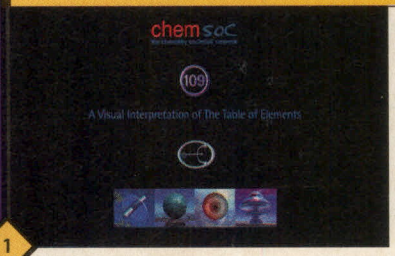
Wee Webbies

http://www.weewebbies.com

The Wee Webbies aren't a breed of small ducks, they are in fact responsible for a huge site full of fun for all the family

Education sites

INJECT YOUR INTELLECT WITH A HEALTHY DOSE OF EDUCATIONAL MATTERS

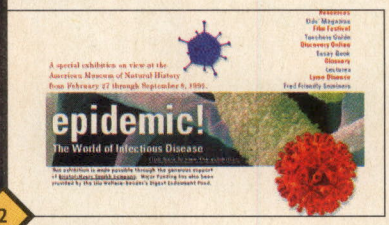


1

Visual Elements

http://www.chemsoc.org/viselements/

Designed to make the Periodic Table more digestible, each element comes with a picture to jog your memory

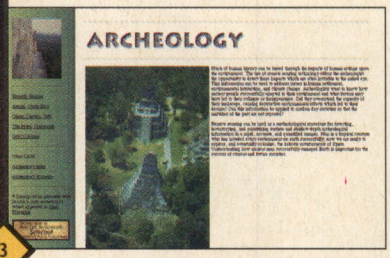


2

Epidemic

http://www.amnh.org/exhibitions/epidemic

Find out about all manner of diseases that can be found around the world. The site is to promote the exhibition that's showing at the American Museum of Natural History

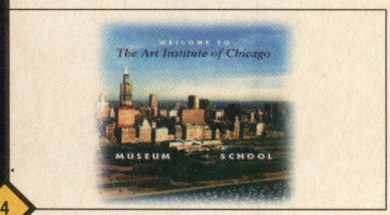


3

Remote Sensing Archeology Research

http://wwwghcc.msfc.nasa.gov/archeology

Find out how remote sensing is being used by archeologists to try and find out more about Mayan society



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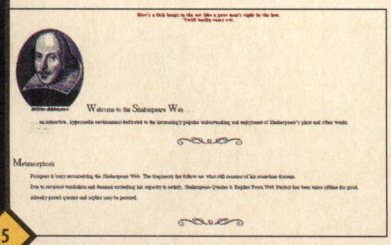
Art Institute of Chicago

http://www.artic.edu

Explore the exhibitions and get lots of other artistic information from this site



5

Shakespeare Web

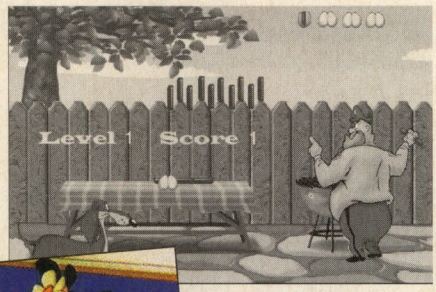
http://www.shakespeare.com/

Learn more about Shakespeare from this interactive site which aims to make the bard more digestible

Cartoon Corner

http://www.cartooncorner.com/index.html

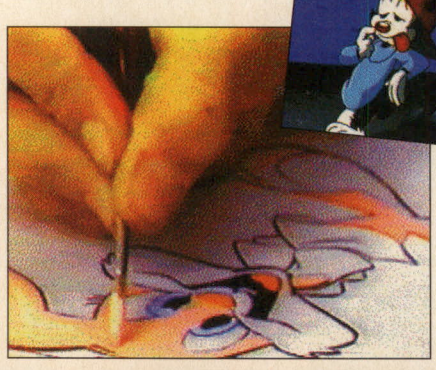
Emmett Scott is here to provide you with all sorts of cartoon capers. Start off in the Art Studio, where there's in-depth lessons on how to draw cartoons, as well as what cartoonists actually do and loads of tips. Then you can join Peetie Heffer (the world's smartest cow) who has loads of puzzles for you to solve. As if all this wasn't enough, you can read stories and rhymes made up by Emmet, and laugh until you wet yourself in the funny pages, where you'll find a selection of hysterical gags, comic strips and riddles.



Warner Bros

http://wbanimation.warnerbros.com/cmp/ani_02mp.htm

Power to Warner Bros, responsible for some excellent cartoons. Also responsible for quite a nifty Web site, complete with downloadable games that will keep you amused for hours. There's information about all of the Warner Bros cartoons, including *Pinky and the Brain*, *Animaniacs* and *Batman*. Then if you go to the Animation 101 section, you'll find out what goes on to make the cartoons, from the writers coming up with ideas, right through to the final sound effects. But by far the best section of the site is the Games Gallery, especially the excellent Hot Dog Toss game, where you get to fling frankfurters with the faint hope of getting them in a bun. Hysterical.



DC Comics

http://www.dccomics.com

Home of Batman and Superman and the truly excellent Wonder Woman, DC Comics has churned out some excellent superheroes in its time. At the site, you can find out about all of them, with in-depth profiles and all the latest news. If you have younger children who are interested in comics, you can also access the excellent DC Comics for Kids, in which all the characters look a bit more chirpy, and you can download pictures to colour in at your leisure. You can buy all the comics online, and even have a sneaky peak at some black and white advances of future stories.

White House for Kids

http://www.whitehouse.gov/WH/kids/html/home.html

Although what actually goes down in the corridors of power may not be that suitable for the children among us, the White House for Kids is full of fascinating facts and stories about that ominous building. The official guides for around the house are Socks and Buddy, the White House cat and dog, who guide you through the history of all that's gone on through the ages. You get to have a nose around the house, find out about the presidents, the presidential pets and the presidential offspring. And after all this, you can even send an email to Mr Clinton.

Stars and their Constellations

http://www.astro.wisc.edu/~dolan/constellations/

A site that's slightly more in-depth than the NASA Star Child, but that's still within the intellectual reach of children. It begins with a look at what is meant by constellations, basically that it was a concept made up by country folk and poets to understand what they were seeing. It's safe to say that the site is run by science rather than fancy. There's plenty of pictures of all the constellations, and a decent, thorough listing of resources and links. The best part of the site is the pictures of the planets, though, which are huge beasts. And despite the scientific tone, there's also a bit about the star myths of the ancient Greeks and Romans.

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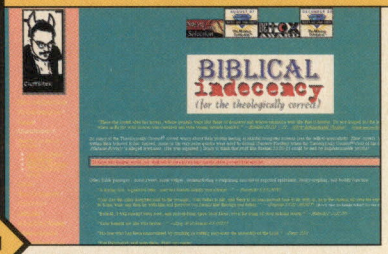
Over 18s

THE PLACES TO COME IF YOU'RE FEELING SAUCY, SEXY OR JUST PLAIN NOSEY

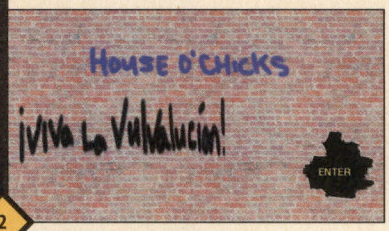


1

Biblical Indecency (for the Theologically Correct)

http://www.exit109.com/~mcluff/bible.shtml

Very funny site that picks out all the saucy bits you can find in the Bible. It's not all fire and brimstone, you know

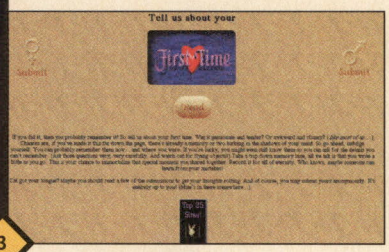


2

House of Chicks

http://www.houseochicks.com/

Brought to you by Annie Sprinkle, this site has all the information on how, and where, a woman should be treated



3

My First Time

http://myfirsttime.com/

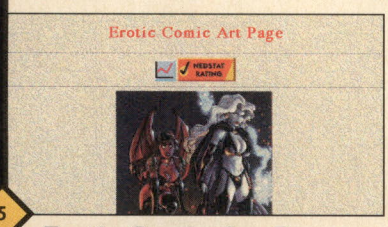
Everyone remembers their first time, and you can read other people's descriptions of their first sexual experience

4

Hoot Island

http://www.hootisland.com/

A site that has the premise that everyone should go through life naked and laughing. You'll find nothing horrific here



5

Erotic Comic Art Page

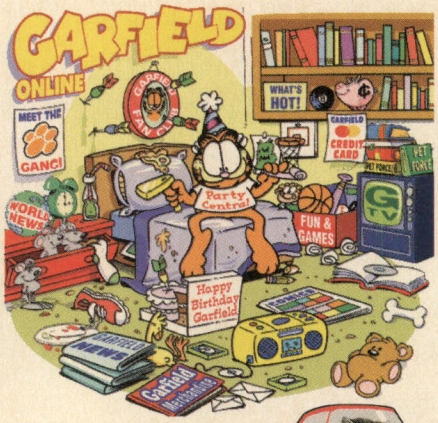
http://www.cybercomm.nl/~vandeijk/eaindex/pulpart/erocomic.htm

Different artists submit their work to this site full of sketched sauciness. Nothing to offend

Garfield Online

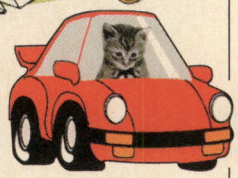
http://www.garfield.com

Garfield has been going for longer than you'd think, and the cynical cat shows no sign of fading away. Join the lasagne-loving feline in his cartoon japers, and find out about the other characters, namely Jon, Arlene and the ever-dribbling Odie. You can join Garfield in some fun and games, which include catching lasagnes, and splatting cakes. And because Garfield has turned 20, there's also lots of party shenanigans.



The Kitten Club

http://www.cats.org.uk kitten.html

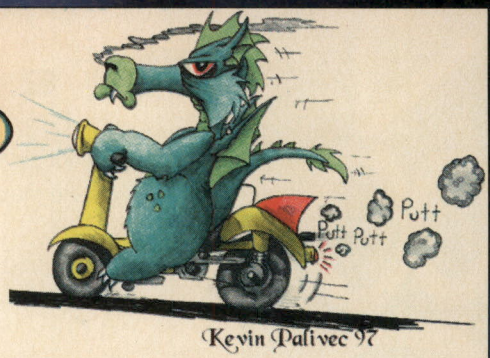


Brought to you by Cats Protection (the group formally known as the Cats Protection League) this site has all sorts of information for children who love cats. There's some general news on what the charity is all about, and then there's loads of funny photos of cats generally being cats. And if you're in the market to adopt a cat, there's plenty of help and advice, pointing out everything that you need to consider before getting your new friend. The saddest part of the site is the Adopt a Cat section, where you see a selection of cats that need rehoming. This is sad simply because every time we visited, poor old one-eyed Thumbelina was still in need of a home. Someone take her, please.

Malathar's Dragons

http://camalott.com/~malathar/dragons

Whether dragons existed or not, they are creatures which have captured the imagination of many people, both in literature and art. This site concentrates on the latter, with loads of pictures of dragons getting up to all sorts of mischief. If you like big scary, scaly beasts, then you'll be disappointed, as the dragons on this site are more of the irresistibly cute persuasion, but they're very good, nevertheless.



FairyTale, A True Story

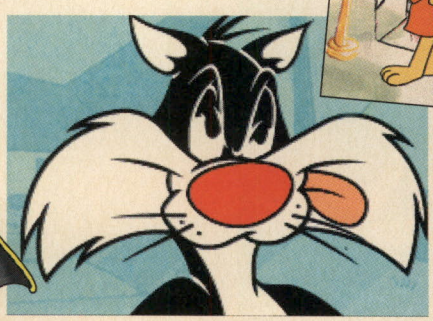
http://www.fairytalemovie.com

Even if you haven't seen the film, it is well worth visiting this site if you have the remotest interest in fairies. What you'll find is an enchanted piece of the Web full of pictures, games and goodies that will delight the most hardened cynic. You begin by having to decide whether you believe and fairies or not, and once you've decide that you do, it's time to get accustomed to the flutter of little wings, and follow the film, which was based around the Cottingly fairy case. Banish your cynicism and believe in magic for a while.

Cartoon Network

http://www.cartoon-network.co.uk

Fit to burst with cartoons like *Cow and Chicken*, *Scooby Doo* and *The Mask*, Cartoon Network is a great peddler of fun. There's news about all your favourite cartoons, as well as information and schedules. Go along to Toon-a-Mania for pictures and video from all the cartoons featured, and then waste a few hours downloading the great games on offer, which are suitable for Macs and PCs. Hooray.



Barbie.com

http://www.barbie.com

Is she a bimbo, or plastic fantastic? Whatever iconoclastic knots adults get twisted up in when deciding if Barbie is a good role model, kids absolutely love her. Her pink world managed to get rid of Sindy and her big head, letting us indulge in her trendy lifestyle. This site has a healthy dose of girl power thrown in, with a 'Be Anything' motif running through it. As well as concentrating on the dolls, there's also plenty of input from visitors, and the absolutely best thing is that you can design your very own Barbie. How cool is that?

Sabrina the Teenage Website

http://www-scf.usc.edu/~zabie/sabrina_home.html

Skipping happily along from *Clarissa Explains It All*, Melissa Joan Hart changed from an ordinary do-gooder to a do-gooder that happened to be a witch. Living with her two Aunts and cat, Sabrina goes through life spreading a bit of magic here and there. There is also a huge amount of fa sites, of which this is one of the best. Check to see if you've missed any episodes using the guide, and fill your life with pictures of Sabrina, thanks to the images provided. Then kiss a toad and say abracadabra.

Dawson's Creek Unofficial Web Site

http://dawson.purdueonline.com/creek.html

Dawson's Creek has a storyline that requires a degree in rocket engineering just to keep up. If you miss any episodes, forget it, the story develops at a rollercoaster rate that will have your head spinning. But if you have followed the story from the beginning, you'll love this site. There's a huge amount of information to be unearthed here, including character profiles, episode guides and some great pictures. You can also write to the cast and find out about past guest appearances.

Apple Corps

http://apple-corps.westnet.com/apple_corps.html

The online version of Mr Potato Head, only without the potato head, Apple Corps lets you plant features on fruit in amusing styles. Simply decide upon what you want to use – there's a choice of an apple, a pumpkin, an artichoke, an aubergine and Bill Clinton. Then get clicking on the comedy eyes, noses and ears, and create your masterpiece. And it's really ver

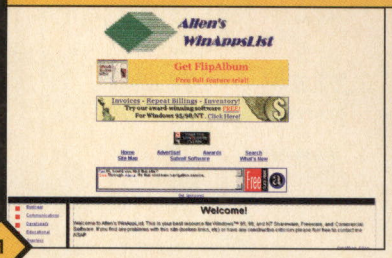
Animabets.com

http://www.animabets.com

Aimed more at younger Web users, the Animabets are a group of 26 animals (one for each letter of the alphabet) who will educate and amuse children. There's loads of information about many varied topics, such as cooking, environment and self-defence. There's also loads of activities with each of the Animabets, including helping Alley Alligator diffuse a bomb. Strange thing to have on a kids' site...

Shareware sites

SHARE AND SHARE ALIKE WITH THESE SITES FULL OF STUFF TO DOWNLOAD



1

Allen's WinAppsList

http://www.cybercomm.nl/~vandeijk/eaindex/pulpart/erocomic.htm

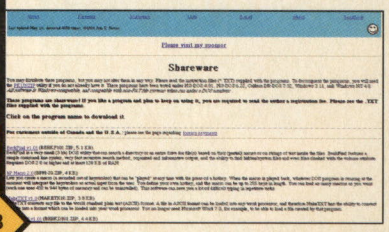
A helpful site that will put you in touch with loads of shareware applications

2

Shareware Galore

http://www.orion-cs.com/trutious/shareware.htm

A helpful site that has links to many other places which will provide you with as much shareware as you need

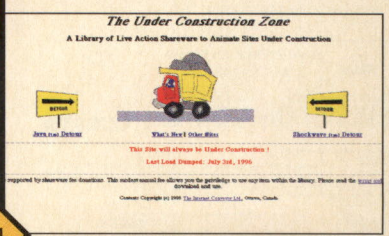


3

Shareware DOS Facility

http://alkaid.knotwork.com/shareware/

A list of shareware programs that's a decent size, complete with a short description of each



4

The Under Construction Zone

http://www.conveyor.com/ucz/

A site that has links to shareware for those occasions when you've put your Web site under construction

5

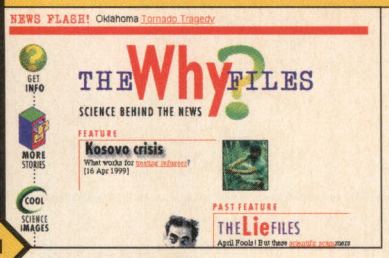
MacPicks

http://duff-5.ucs.ualberta.ca/~mmalowan/Picks.html

A site that details the best and latest shareware releases for Macs

News sites

KEEP YOUR FINGER ON THE PULSE OF ALL THAT'S HAPPENING AROUND THE WORLD



1

The Why Files

http://whyfiles.news.wisc.edu/

This site looks at all the current news headlines, and then proceeds to explaining the science that lies behind the headlines

2

APB Online

http://www.apbonline.com/

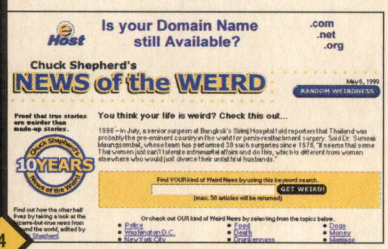
For those who like that sort of thing, this site has all the latest news about crime from the States

3

National Enquirer

http://www.nationalenquirer.com/

Much more exploitative than our tabloids, the *National Enquirer* often crosses lines of decency, hence making a good read

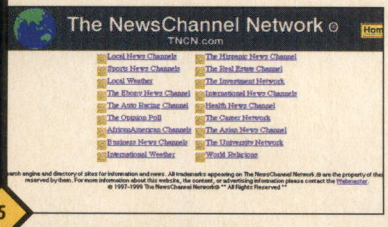


4

News of the Weird

http://www.newsoftheweird.com/

Bizarre stories from around the world that make you relish a nine to five existence

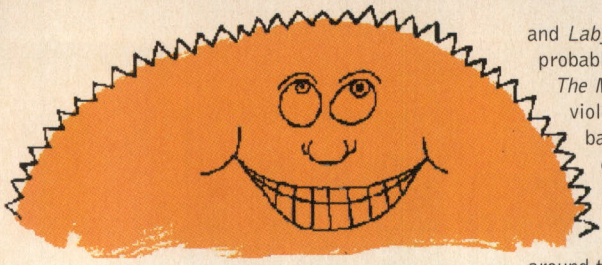


5

The News Channel Network

http://www.tncn.com/

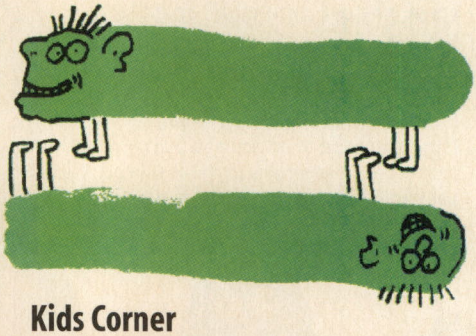
The News Channel Network is a search engine and a directory for all information and news sites



Haring Kids

http://www.haringkids.com

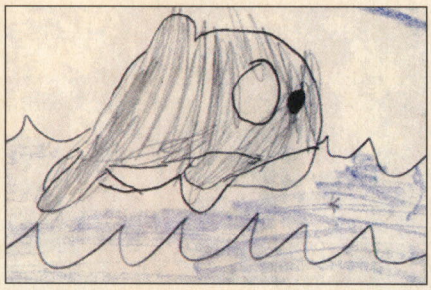
A beautifully bold site that was designed for kids under 14 to inspire a love of art and online books. There's loads going on, from the little people who crawl all over the screen, to the morphing figures. Unfortunately, Keith Haring died in 1988, but his work for anti-apartheid and AIDS charities is an excellent example of his colourful vision. But it's not just art on his site, there's also information of his books, and plenty of information about the artist. Thoroughly recommended, whatever your age.



Kids Corner

http://kids.ot.com/

A positive melting pot for kids all around the world, Kids Corner is a place to meet and greet other children. You can get together in Kids' Speak, which is split into two age groups, or share your art with the rest of the Kids Corner community. You also get to have a go with the hangman game, or contribute to the It's Your Turn section with your stories, poems or photography.



Muppets.com

http://www.muppets.com/

Anything that has the Henson name to it always seems to appeal to kids, even if they weren't around the first time it appeared. But despite making great films like *Dark Crystal* and *Labyrinth*, Henson is probably best known for *The Muppets*. With a violent pig and a battered frog, plus a comedy bear, both the *Muppet* series and films have amused audiences around the world. And if you are a fan of the showbiz creatures, you'll love this site. You can catch up with Fozzie on his virtual comedy tour, or get the profiles of your favourite character. You can even get text translated in Muppet speak. Things don't get much better than this.

Paddington Bear

http://www.paddingtonbear.co.uk

Poor Paddington, arriving on England's stores with just his suitcase, duffel coat and marmalade sandwiches for company. Although he has been off our screens for quite a while, Paddington remains in many people's hearts, and this is an excellent site dedicated to the little bear. You'll find heaps of information about Paddington books and videos, as well as loads of games and news. A really nice site to visit.

The Enchanted Forest

http://camel.conncoll.edu/ccother/ejcam/forest.html

A site that tries to emulate the wonder of the forest and all the creatures that live there, and we're not just talking rabbits and birds. It is the forests where fairies dwell, and all their mystery and playfulness is captured on the site through the use of poetry and art work. It's not the biggest fairy site in the world, but it certainly has plenty of atmosphere that will grab the imagination.

FREE DOMAIN NAME

INCLUDING INTERNIC/NOMINET NAMING FEES

At Webfusion, we believe in making web hosting easy - one call, one step, one invoice. That's why when you choose to host your website with us as a Business Pro customer we take the hassle and expense out of getting started by including your domain name registration in the package.

Why pay £100+ for a domain name when you can get the same service FREE, GRATIS and FOR NOTHING? And there's no waiting for a name transfer - your domain points to your Webfusion account from the start.

The Business Pro is one of the most highly featured and inexpensive quality hosting options in the World - just take a look at everything that's included in the price.

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We think this is the best deal on offer in the UK, but if you don't agree you can take advantage of our 30-day money back guarantee. Don't wait - call now and get setup today!

DOMAIN NAME REGISTRATION

Your own domain name is essential to presenting a professional image online - which looks better? "www.freespace.anyhost.com/users/~smith943/" or "www.SmithToys.com"?

Even if you're not ready to sell online yet, the best domain names are being snapped up fast. You'll have to act quickly to get your company name registered for future use, and stop anyone else using it.

We can register your domain name today even if you don't host a website with us - FREE! All you pay are the naming authority fees (£80 or $70 for 2 years).

You can save even more if you host your site with us, but if you don't need webspace right now, we can 'park' your name on our servers, or forward traffic to your existing webspace for only £25 per year.

BUSINESS PRO
What's Included?

- www.yourname.co.uk or .com
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- 100Mb fast UK-based webspace
- POP3 email, unlimited addresses
- unlimited autoresponders
- your own announcement lists
- full CGI-bin + pre-installed scripts
- MS Frontpage extensions
- SSL access - E-commerce enabled
- FTP and telnet, unlimited updates
- PHP3, MySQL & Miva support
- RealAudio support as standard
- fast, responsive technical support
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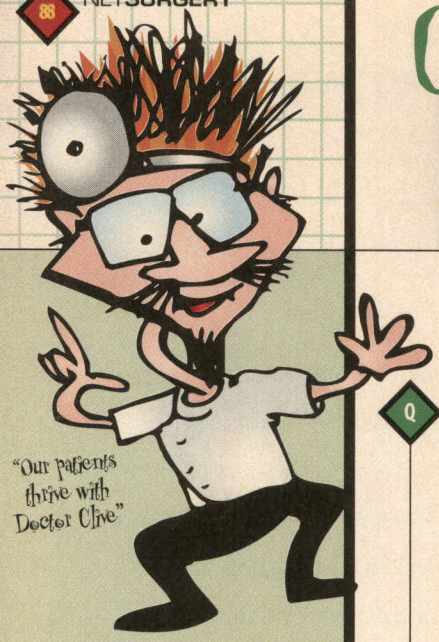


Clive Parker's NET SURG

Get the thermometer warmed up, because Dr Clive is all of your Internet emergencies, casualties

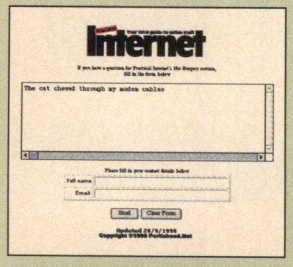
NO DLL

Q I'm trying to run a program from your cover CD, but every time I try to run it, I am told that a DLL file cannot be found. Apparently, the MFC42.DLL is missing. Is this my fault? Have I deleted a file that I shouldn't have? I'd really like to use the program.

Ed Sekula

A **You don't actually mention which program is causing the problem Ed, but I can still give you a bit of helpful advice. First, uninstall the program and then reinstall it from the cover CD. If this doesn't work, you will have to take more drastic action. The MFC42.DLL file is actually used by several different programs. Luckily, you can download the file from the Internet.**

Go to http://www.perlvision.com/pce/mfc.htm and click on the MCF42.ZIP link to download a compressed ZIP file containing the MFC42.DLL. After downloading the ZIP file, decompress it and then run the SETUP.EXE file to install MFC42.DLL.



Send your questions by email to **helpdesk@paragon.co.uk** or fill out the Web-based form at **http://portishead.net/helpdesk.html**.

Lost in space

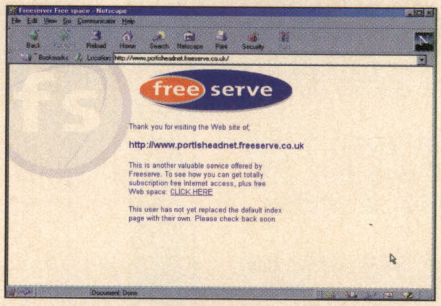
Q I have made my own Web page using Microsoft Publisher and have published it to my Web site on Freeserve but I am still getting the Freeserve site logo when I go to the site. I have read the online help but it is about as clear as mud. Please can you assist me please? I have been through all of the back copies of the magazine but I can't find anything that helps me.

J P Meakin

A I'm assuming that you have uploaded your Web pages to the correct URL on Freeserve (**uploads.webspace.freeserve.net**) and have used the correct username and password for your account.

The problem lies with the way Freeserve's Web space works. When you upload your first set of files to Freeserve, a file called INDEX.HTML is automatically created in your Web space directory. This is the default home page for the Web space directory, so if you just type your URL as **http://www.beechtrees.freeserve.co.uk/** then you will see the default page created by the service. What you have to do is change the name of your home page created in Microsoft Publisher to INDEX.HTML. Now you must publish the site to your Web space on Freeserve again, this time your new INDEX.HTML page will replace the one created by Freeserve and people will be able to see your Web site.

By typing the name of your original file as part of the URL like this: **http://www.beechtrees.freeserve.co.uk/myfilename.html** you will be able to see your pages.



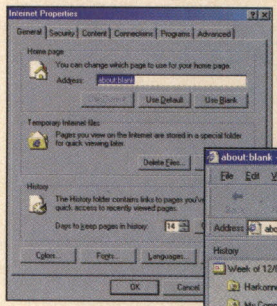
If you don't name your home page as INDEX.HTML, this is what you will see when you look at your Web space on Freeserve

Rewriting history

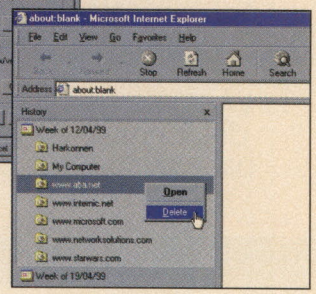
Q I've got a question that has been bugging me for ages. In Internet Explorer you can pull down the address bar at the top of the window to display all of the Internet addresses that you have typed into the browser. How can you delete the addresses you don't want to visit again?

'Chef'

A I'm not 100 per cent sure about this, but I understand that this feature is controlled by, and linked into, the History settings. If you go to the View menu and select Internet Options, you can change the History settings in the General tab.



Under the General tab of the Internet Properties control panel, you can clear the History links



In the History bar you can delete individual entries in the History list

INSTALLING THE

Q I write with reference to your answer in Issue 26 to Dave Priestley and his problem of encountering the WNetGetuser Returned box every time he logs into Windows. I have the same problem. I can – like David – access the Internet without difficulty, it's just that this damn box keeps appearing every time.

You gave two reasons – either a problem in the Computer name box or no network client installed. On checking my Network in the control panel, I did not get the 'Identification' tab, only a configuration tab. You state that Dave had a client installed because he could access the Internet. I don't seem to have a client installed even though I can access the Internet. I only have the following network components installed, Dial Up Adapter and TCP/IP, but no client.

If I click on 'Add' and then on 'Client,' it gives me a list of Clients to choose from. It tells me to click on the 'Have Disk' button to install from a disk. I use Freeserve and have its disk. I have not gone any further because I have no problems accessing the Net. I don't want to ruin my configuration by doing things I don't understand.

Brian Reynolds

A Well Brian, you really should have the Client for Microsoft Networks installed on your PC if you are using the Internet. Installing it should get rid of the problem. It should be installed as standard on your system. To install the Client for Microsoft Networks you will need your Windows 95 or Windows 98 CD. This is the disk referred to in the Have Disk option, although the files may already be stored in the Windows System folder on your hard drive. Follow these steps below for Windows 98, the Windows 95 procedure is practically identical.

ERY

here again to sort out and headaches

At the bottom of the General page there is a History section. Here you can select how many days to keep pages listed in your History folder and you can click on the 'Clear History' button to delete all links instantly.

You can also open the History bar and right-click on any entry, then select the 'Delete' command from the pop-up menu to get rid of individual links.

As you can see, my Mac sits happily next to my PC and is better than the PC at many tasks

Q Amiganuts

It's all very well for you PC experts to look down your nose at us newcomers from the Amiga platform, and suggest that Paul Hughes should have first made a few searches before troubling you. Well, I HAVE tried many searches using all sorts of search engines, including the address you quoted – http://www.madpc.demon.co.uk/mad/uae.html It got me absolutely nowhere, all I got was an error message when I typed it in. I know such a program exists, but I just cannot find an Amiga Emulator for my PC. As, in every other respect, I find your magazine absolutely superb, can you please visit this problem again because there are a lot of us ex-Amigans who want to transfer some of our old favourite programs, and data, to our new toy.

Ivor White

A Hey, I don't 'look down my nose' at newcomers from the Amiga platform just because I happen to have a pretty good PC. I graduated from the humble Sinclair

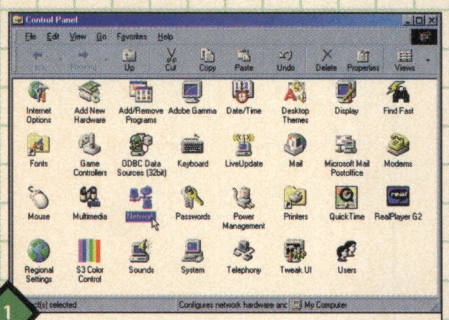
VEXED BY VIRUSES

Q I have just connected to the Internet with Global. All in all, it took four hours and loads of patience from the support staff to get the software working. They had to talk me through the whole procedure, as they thought my modem was faulty because of the symptoms I described. However, it turned out the problem was with my McAfee anti-virus program I had installed. I don't want to install the program again, but I need to protect my machine against viruses. Is there anything that you can suggest?

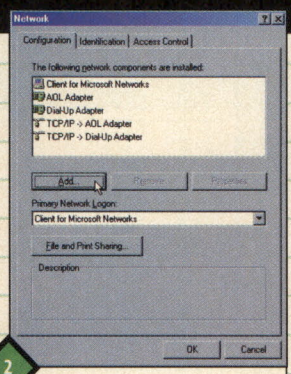
Kieran Love

A **Sometimes there are problems with anti-virus programs and Internet software. Try Dr Soloman's Home Guard, as this is designed to work alongside Internet software. Visit http://www.drsolomon.com/index_new.cfm for more information, or buy a copy for around £30.**

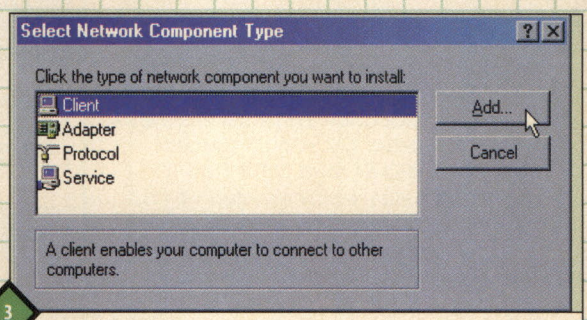
CLIENT



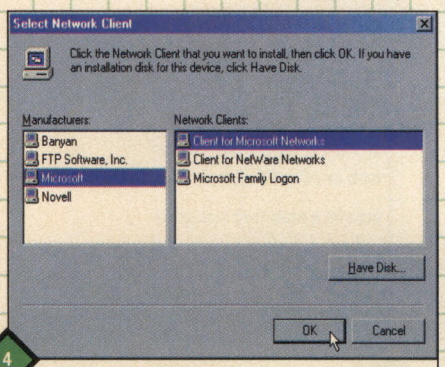
1 Go to the Start button and select 'Settings,' 'Control Panel.' When the Control Panel window opens, double-click on the Network control panel to open it



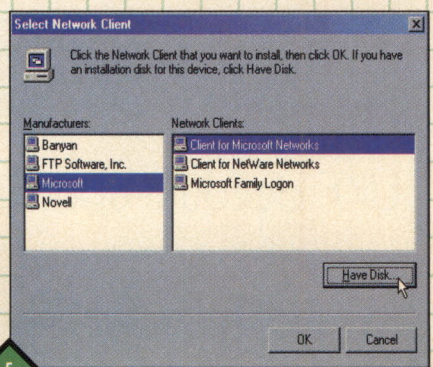
2 When the Network control panel opens, click on 'Add' under the Configuration tab to add a new component



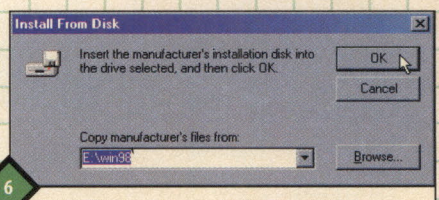
3 In the Select Network Component Type window, click on the 'Client' icon and then click on the 'Add...' button



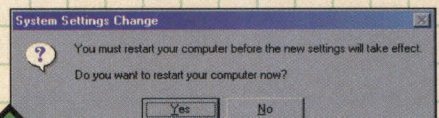
4 In this box, select 'Microsoft' and then select 'Client for Microsoft Networks' in the Network Clients window. Click on the 'OK' button, if the files are on your hard drive the new component will install automatically



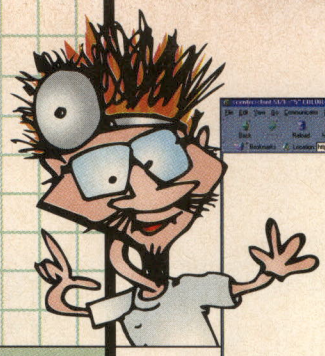
5 If the previous step generates an error message, insert your Windows 95 or Windows 98 CD into your CD-ROM drive and then click on the 'Have Disk...' button



6 Use the pop-up menu in the Install From Disk window to select the drive with your Windows CD in it and click on 'OK.' The files should now be installed automatically



7 After the installation of the Client for Microsoft Networks is complete, your PC will have to be restarted. Click on the 'Yes' button to restart your PC

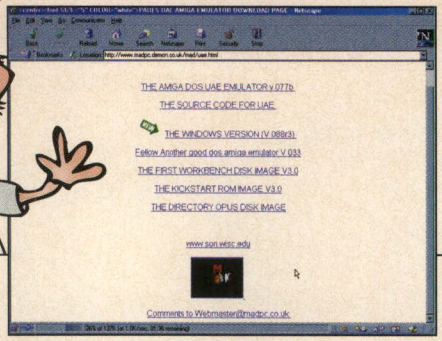


HOTMAIL HASSLES

Q Hi Clive. I am trying to read my Hotmail emails offline using Outlook Express, but I am not sure of the incoming and outgoing server names. Currently, I am giving 'pop.hotmail.com' for both, and the outgoing mail seems to be okay. But when I try to receive mails, sometimes it works and sometimes it hangs. Could you please help? Thanks and regards.

Anup Varma

A **I've checked with Hotmail and the service is supposed to be Web-based only. This means you can't use it in traditional email applications such as Outlook Express, Outlook 98 and Eudora Pro. I'm afraid that you're stuck with the Web interface.**



The page UAE Amiga emulator is really, really, really at http://www.madpc.demon.co.uk/mad/uae.html

Spectrum to the Spectrum Plus and Plus 2, on to an Atari ST with a huge 12Mb of RAM and an 80Mb hard drive.

I then moved into the Macintosh world, using an ST emulator to transfer files and data to my latest platform. The reason I use a PC comes out of sheer necessity. I need it for my work. Ninety nine per cent of the queries I get are for PCs running Windows 95 or 98, so I have to use a PC. I still have a damn fine PowerPC Macintosh running MacOS 8.6, and I'll be decorating my desk with a new G3 desktop Macintosh soon.

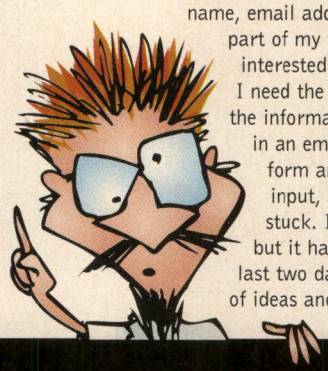
Now on to your query. The URL you listed in your email seems a little garbled. The last bit – the file name – should read uae.html, not uae.htmland as you stated in your mail. If you trim the last three letters from the URL, you will end up at the page I first described. Here's a new screen grab to prove it. Go along to **http://www.madpc.demon.co.uk/mad/uae.html** to download all the files you need to run Amiga software on your PC.

Q

You have mail

I read *Practical Internet* fairly often and am in my second year of university at Exeter studying Computer Science. Currently I am designing a Web site for my father's company because Web design is something that interests me a great deal. But I have encountered a problem. My father wants a page with a form on it where a potential client can fill in his details such as name, email address and indicate which part of my father's business he is interested in.

I need the form to be submitted and the information to be sent to my father in an email. I am able to create the form and check the fields for input, but this is where I get stuck. I'm sure it must be possible but it has been baffling me for the last two days, and now I have run out of ideas and decided to ask someone

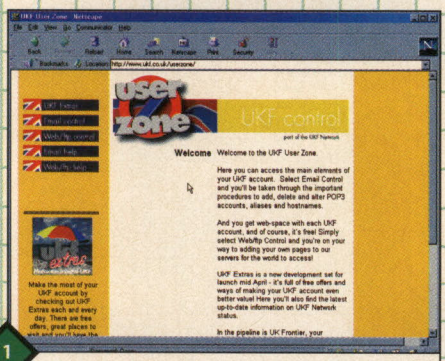


FANTASTIC VOYAGE

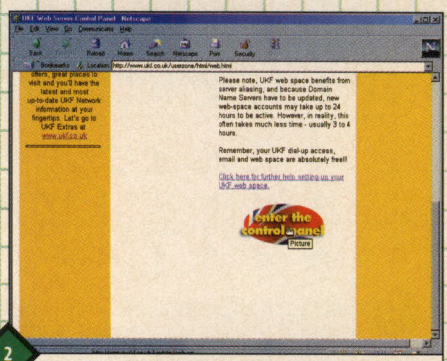
Q Dear Clive. I have recently purchased *Practical Internet* magazine in the hope for assistance in publishing my Web site to my Web space. I am a Mac user and I have made my own Web pages on Microsoft Office 98 in Word. I have an account with UK Fantastic where I have my own space. What I am having trouble with is getting my pages from my computer to my space. I am relatively new to the web and would be extremely grateful if you could give me some advice on how to get my site up and running.

James Bell

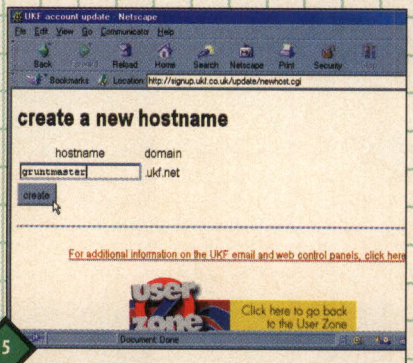
A Okay James, here's a quick rundown on setting up your Web space on UK Fantastic and how to set up Fetch on the Macintosh to upload your files.



1 On the UKF home page, click on the icon to go to the UKF User Zone. This is where you can configure your account. Click on the middle icon on the left labelled 'Web/ftp control'

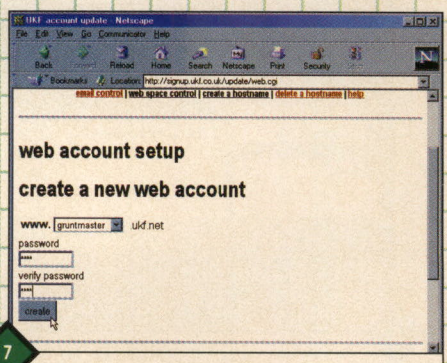


2 On this page, read the text and then scroll down to the bottom of the page and click on the 'Enter control panel' image



5 Type the hostname you have chosen for your site into the hostname box and then click on the 'Create' button. I've used the Dilbert-inspired 'gruntmaster' domain name

6 After the hostname has been accepted you come to this page. Click on the 'Web space control' link to continue



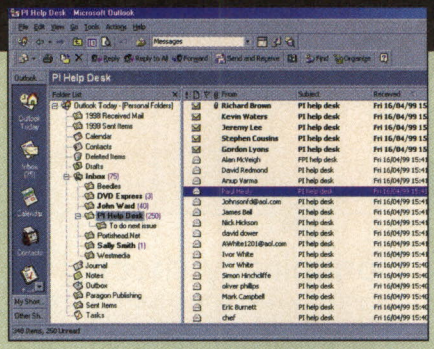
7 Enter a password into both boxes on the next page and click on the 'Create' button to continue

OUTLOOK & LEARN

I use Windows 95 and have upgraded to Outlook 98 and I like using it. However, I recently installed two USB ports but found that Windows 95B doesn't have the drivers to support it. My question is does Outlook 98 work with Windows 98 or does it just work with 95 and NT? Any advice would be very much appreciated.

Paul Healy

You'll be happy to learn that Outlook 98 works perfectly with Windows 98. I upgraded to Windows 98 as soon as it was released (well, slightly earlier) and the changeover was seamless. Get Windows 98 by all means, and take advantage of those USB ports.



Outlook 98 deals with all of my *Practical Internet* email in Windows 98 without any problems. And don't forget that Outlook 2000 will be along in June 1999

who has expertise and experience. I am using Dreamweaver as the development platform to design the Web site. I would be grateful if you could help me out with this query.

Alastair Banks

A Okay Alastair, you need to use the MAILTO: command in your form to get the form contents sent to your father as an email message. You can set this up in the very first line of the form. Here's what it should look like, assuming your father's email address is father@fathercom.co.uk.

```
<FORM METHOD="POST"
NAME="info_form"
ACTION="mailto:father@fathercom.co.uk?s
ubject=Web form submission: "
ENCTYPE="text/plain">
```

The two important parameters are ACTION and ENCTYPE. The ACTION parameter tells the form that the data is being sent as an email message to father@fathercom.co.uk with the subject heading 'Web form submission: ' The subject heading will enable your father to know when a form has been sent to him when he downloads his email.

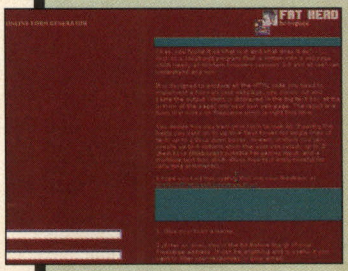
The ENCTYPE (encryption type) parameter must be set to text/plain. This tells the form to send the data as plain ASCII text so it is readable when it arrives as an email message. If you don't define the ENCTYPE, the email will arrive with characters such as + and - symbols instead of spaces, making it very hard to read.

AH, FORMIDABLE

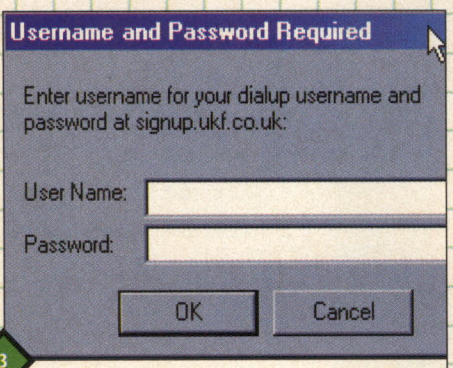
Q As a Freeserve user, I admire your endeavours to provide some 'free' technical support to Freeserve customers. Freeserve could work out very expensive if you had to rely on its telephone support. Since I have been with the service I have noticed that many of the new user enquiries in the newsgroups come from those experimenting with their Web space, and in many cases trying to implement the Freeserve CGI form on their Web pages. Freeserve provides only limited instructions for this, and they are a little unclear. To remedy this I have written a form generating Web page in JavaScript which will produce all the code for cut and pasting into the user's Web page so that it's right the first time. I'm no JavaScript expert, but it works and I hope you can feature it in your 'Free Freeserve Support' section, since I believe it could help out many new users. It's at http://www.fat-head.freeserve.co.uk/formgen/index.htm.

Oliver Phillips

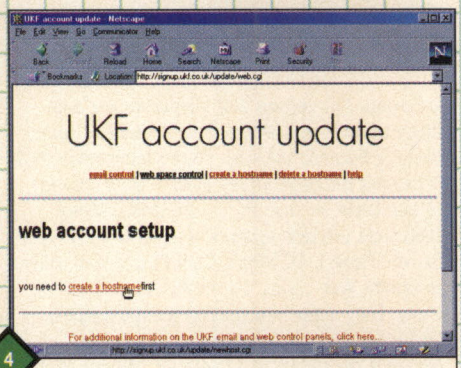
A **Thanks Oliver. Although Freeserve does provide some support on its help pages, it leaves out a lot of details that can make all the difference.**



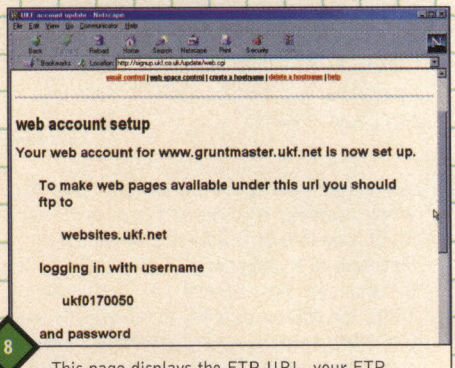
Use Oliver Phillips' automatic generator for creating those awkward Freeserve CGI form scripts. I've tried it and it works



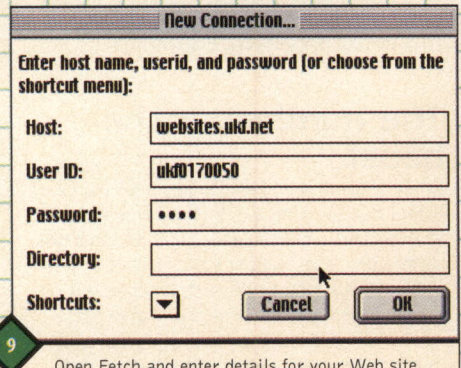
3 Now enter your UK Fantastic username and password. These were given to you when you joined the service. Click 'OK' to continue



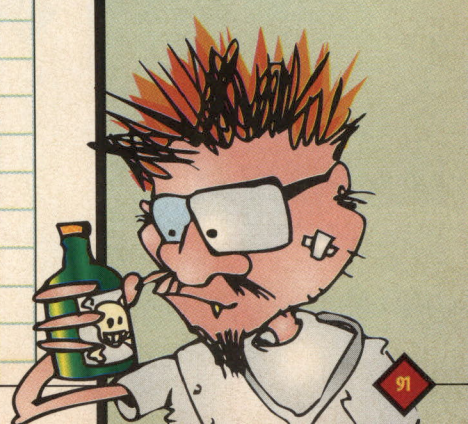
4 On the next Web page, click on the 'Create a hostname' link

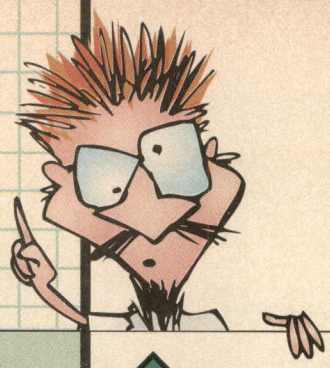


8 This page displays the FTP URL, your FTP username, your FTP password and the URL of your Web site. Mine is http://www.gruntmaster.ukf.net. You have to enter these into Fetch



9 Open Fetch and enter details for your Web site. Type websites.ukf.net in the Host: box, and your user name and password. Click on 'OK' to begin uploading your Web pages



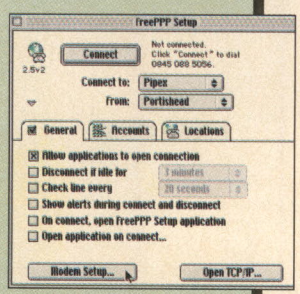


MODEM MUDDLE

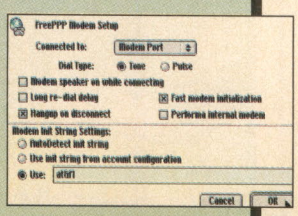
Q I have a US Robotics Mac&Fax Sportster (28.8k) that I'm having a lot of trouble with when connecting to the Internet. I usually log on first time after my Macintosh has been turned off for a while, but then I'll lose the connection after about a minute. It then takes me several attempts – sometimes 10 or 12 to log on again – but generally speaking, it will then hold the connection. This has happened with my first provider (Demon) and is still happening with my new one (UK Fantastic). I have tried another modem that I borrowed, and logged on successfully first time, every time, and held the connection, so I think that it must be something to do with the modem. Can you help me please?

Jeremy Lee

A **It sounds like the initialisation string for your modem isn't correctly set up in MacPPP/FreePPP (depending on which you use). Open your PPP software and click on the modem setup button. In the Modem Init String Settings, enter at&f1 to set the modem to Macintosh mode. This should sort out the problem. If it doesn't work, try entering at&f0.**



In your PPP control panel – this is FreePPP – click on the Modem Setup button to take you to the correct screen



In the Modem Init String Settings field, enter at&f1. This should sort it out

Conspiracy theory

Q My offline browser (WebWhacker V3) works perfectly when dealing with the vast majority of sites that I visit, and I have no complaints about it. However, a few sites, which are always of the high tech variety, seem to give problems. Sometimes, after an apparently successful download, the offline browser tells me that it can't find the requested pages in its database. The number of sites that give this problem seems to be increasing. I have double-checked the offline browser settings, and they are all okay. The offline browser works fine with less sophisticated sites, so there's apparently nothing wrong with it at all.

I cannot help wondering if these problem sites contain some sort of code in their HTML which, intentionally or otherwise, blocks the action of an offline browser so that a potential visitor must go online each and every time to view the content. Clearly, there are many organisations that derive real benefit from repeated online visits to their Web sites. It occurs to me that the practice of offline browsing could be contrary to these interests, and so might be actively discouraged. This could be an unworthy thought on my part, or perhaps I am becoming paranoid. I simply do not know if there is such a thing as an "offline browser-resistant" Web site. What do you think about this?

David Johnson

A I think you are reading too much into the situation. The reason that WebWhacker and other offline applications have trouble in some cases is because the sites do use technology that is beyond the capabilities of an offline browser to duplicate on your PC's hard drive. Many Web sites use technologies such as ASP (Active Server Pages), CGI/Perl, Cold Fusion and other to create Web pages 'on the fly' as you access them. They draw information from databases and other files to create the Web page just before it downloads it to your PC. So the Web page you see in your Web browser does not actually exist as an HTML file.

You may also encounter problems if you try to 'whack' pages that contain Java applets or Shockwave or Flash plug-in content. These files tend not to be stored on your hard drive.

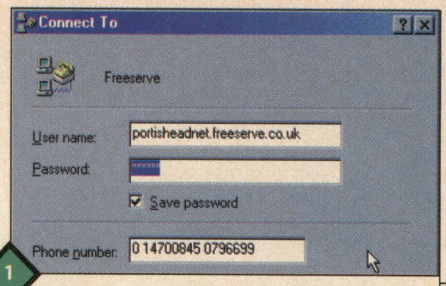
Is there a conspiracy? Probably not.

The number of the beast

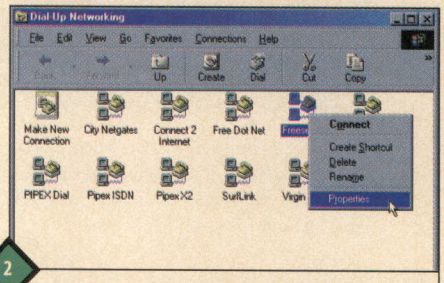
Q While reading your Net Surgery section, I came across a letter from a J Birchall who was having trouble dialling into Freeserve and was getting the "The number you are dialling has not been recognised, please hang up and try again," message. The advice you gave him would have been my first thought too, but when this failed for me, a computer programmer neighbour of mine (everyone should have one) simply went into dial-up connection setting, removed the area code for the Freeserve dial-up server and entered the whole telephone number in the main number box to the right. Guess what? I got through first time and haven't had a problem since. Who was it who said computers were temperamental? Hope this helps your readers.

Jason Mitchell

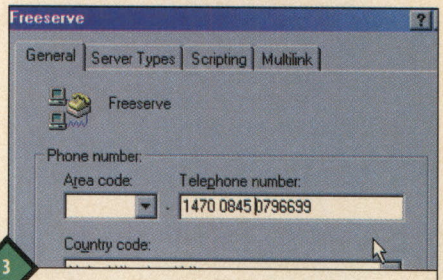
A Yes, I have figured out this solution, too. The problem usually crops up when you enter the BT CLID code to enable Caller ID (essential on Freeserve to enable email and newsgroups) into the area code box. Because the CLID code is 1470, the dial-up software automatically puts a 0 in front, creating an invalid phone number and generating the error message you quote or one that says 'the computer you have called is not answering.' Very frustrating, until you figure out the problem and the solution.



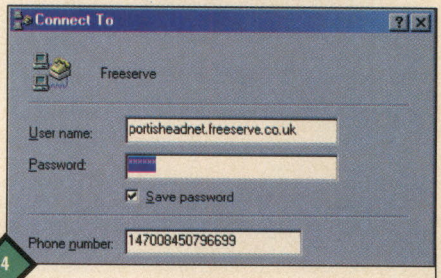
1 If you enter the BT code 1470 to enable Caller ID in the area code box in your dial-up properties, it sticks an unwanted 0 at the start of the number. This will generate an error



2 Open the Dial-Up Networking folder. Right-click on your Freeserve connection and select the Properties command in the pop-up menu



3 Type the complete Freeserve number in the Telephone number: field and leave the Area code: field empty. The complete number is 1470 0845 0796699



4 Now when you connect using Freeserve, the correct number is displayed and used and you can connect without any errors

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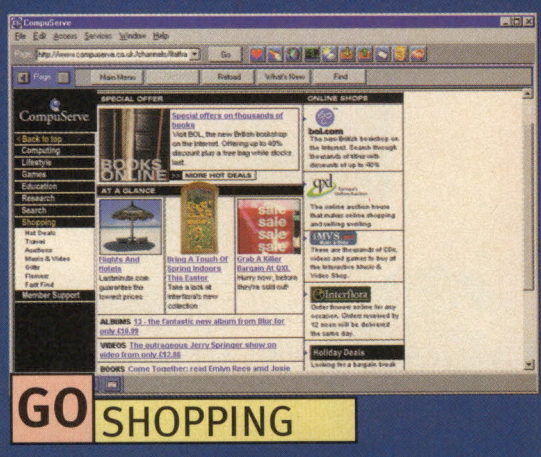

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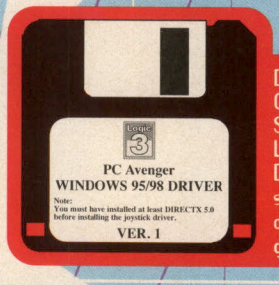

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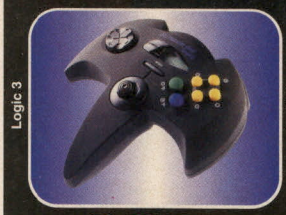
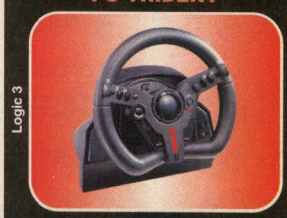
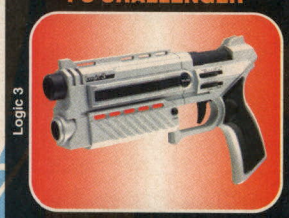
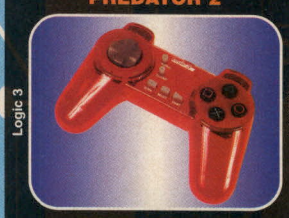
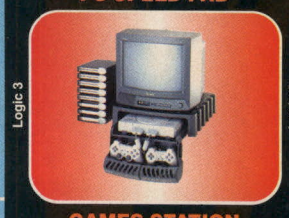

PC TRIDENT


TOP DRIVE 3

PS CHALLENGER


PREDATOR 2


PS SPEED PAD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PREVIEW: ALIENS VERSUS PREDATOR: PAGE 96
PREVIEW: QUAKE III: PAGE 98

NETGAMER

GEOFF SPICK brings you the latest news from the online worlds of death, violence and floppy-hatted wizards!

Experience Everquest

PRACTICALLY as we write, Everquest is screaming its way onto the UK shelves in a unique deal with Electronic Boutique. The massive multiplayer title is slowly overcoming the teething troubles of its American launch and the server-side problems are being ironed out.

If you have chosen to rush out and buy the game, be sure to check out the Network Status page on the Everquest site that keeps gamers in touch with the state of play of all the expensive hardware that hosts the games.

The news page also is a source of invaluable information, including this gem: "On Saturday, Darkenbane and The Horde will launch an attack on Freeport and surroundings zones between 10PM and Midnight EST (7PM and 9PM PST). We cannot give you the exact time, since this is a war." Just so you know what you are letting yourselves in for! See **http://www.everquest.com**.

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Can the shiny man use his metallic powers to overcome the undead?

TOP DEMOS!

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A really stunning 3D shooter in an arcade stylee from Rage Software

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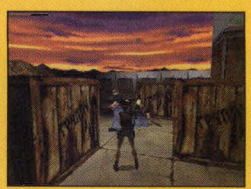
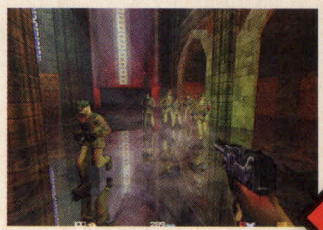


3. **TOCA 2 Touring Cars**
http://www.codemasters.com
The absolute best a Honda has ever looked

iMagic at war

INTERACTIVE Magic, who helped pioneer much of the online gaming market, recently decided to relaunch itself as iMagic Entertainment Network. It will concentrate solely on online gaming, selling off its CD-ROM games business. As a result, members of the iEN team based in Dallas have left the company to start up their own organisation, Playnet. The reason for this revolt looks like iMagic's insistence on moving operations to North Carolina. While this is an on-going story, we can only hope that current popular online hits like Warbirds will continue to flourish and future projects like Shock Tank will come to fruition.

In the meantime, iMagic UK has Mortyr to tempt your FPS taste buds with. Mortyr offers intense, level-based gameplay, spectacular visuals and incredibly realistic environments all supported with an immersive storyline. In it, you are Mortyr, a renegade mercenary turned time traveller sent back to World War II to stop the Nazis. See **http://www.imagicgames.co.uk** for more info.



Mortyr is the last of the Interactive Magic CD-ROM based games and looks a bit of a cracker

Anarchy on the Net

"TIRED of little elves with bows? Fed up with spell-flinging goblins? Bored to death by the solitary world of linear games? Despair not. Freedom is on its way, and its name is Anarchy Online." That's the intro to the Anarchy Online Web site – the game under development from Funcom. It is attempting to move away from the territory that's so firmly occupied by Ultima Online, Everquest and Meridian.

Due for release later this year, there is plenty of information on the site but little in the way of imagery with the company waiting until the game is of suitable quality to be shown. See **http://www.anarchy-online.com**.

Coming your way soon, Anarchy promises to change the face of online role playing

INFO

If you were interested in last month's news about Driver, check out this exciting news. Antonio Fargas, aka Huggy Bear from *Starsky and Hutch* will be fronting the TV advertising for the game. Now how cool is that? Look out for him in July!

Publisher:	Fox Interactive
Web:	http://www.foxinteractive.com
Release:	June 1999

ALIENS VERSUS PREDATOR

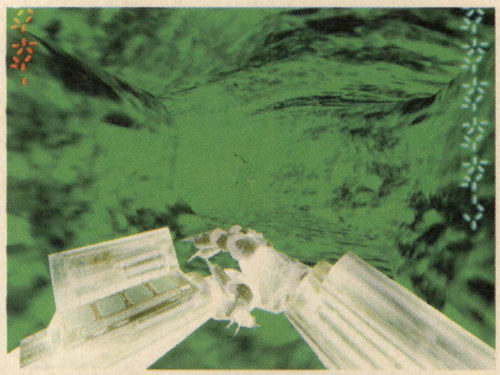
Take a deep breathe and plunge yourself into a world of terror

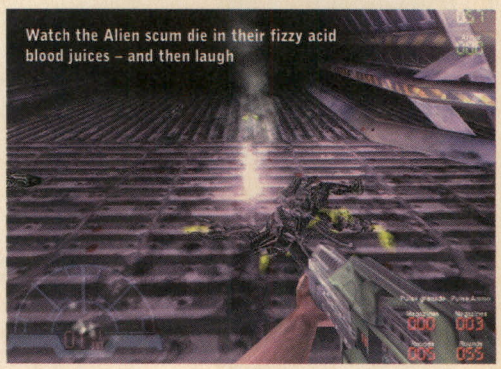
The purist gamers may be waiting for Quake III to kick down their doors but the average game fan and every sci-fi buff in the universe is waiting to play Aliens versus Predator. More than a game, this is the culmination of a dream that, for the elderly gamer, started with Activision's Aliens back on the eight bit machines, and then took in the Atari Jaguar and the odd unofficial Doom and Quake expansion along the way.

We've been playing the latest build, 0.80, and can report that the wait has been well worth it. This game is dark, frightening, atmospheric, maxed out on multiplayer and puts you firmly in the boots, claws and dread's of the nastiest races ever seen in science fiction.

For those too young to understand the fuss, the Alien first appeared in a film of the same name. Directed by Ridley Scott and created by mad Swiss artist HR Giger, it told the story of a spaceship that lands on a remote planet and picks up an unwanted visitor. The visitor explodes out of John Hurt's chest and grows at an alarming rate, drooling acid, attacking with razor teeth, a whip tail and metallic claws. Never has a movie so effectively been stolen by its baddie, despite Sigourney Weaver's heroic survival act as Ripley.

The sequel, *Aliens,* was the action film of the eighties with hordes of Aliens taking on and devouring a small troop of Colonial Marines sent out with Ripley to rescue a group of colonists on the original planet. The next two films were frankly disappointing, but still laced with the terrific presence of the Aliens, although *Alien Resurrection* with Ripley cloned as a hybrid Human/Alien had its moments.





Watch the Alien scum die in their fizzy acid blood juices – and then laugh

Predator was one of the films that made Arnie the global star he is today, but the stealthy alien hunter stole the film outright. Its trophy hunting antics that slaughtered Arnold's special forces unit had all the toys and tricks you'd hope alien visitors would bring. Invisibility suits, tracking lasers, razor sharp blades, dreadlocks and bright green blood!

Predator 2 was a routine action movie with Danny Glover but showed the first link between the two alien races – an Alien skull in a Predator trophy cabinet. It also gave a few clues as to the Predator's noble hunt ethos. Since then, graphic novels have linked all the races in a series of gripping stories that begged for a decent computer game. Rebellion, the developers, first tried one on the ancient Atari Jaguar console and produced an atmospheric, effective but

VISION OF DEATH

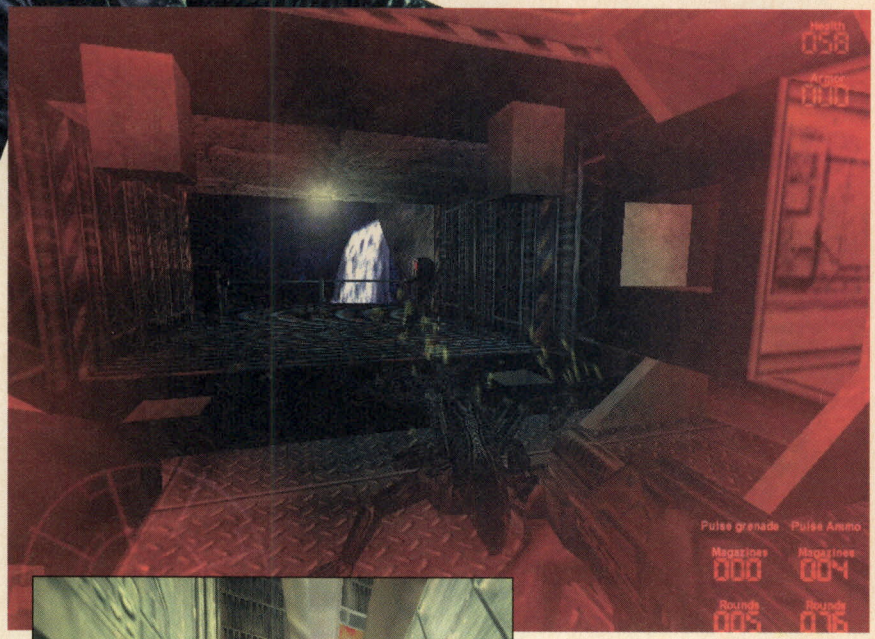
DO YOU SEE WHAT I SEE?

THE Predator can be seen in a number of spectra, enabling him to see his trophies in any lighting conditions. He can also turn invisible!

This is the normal view you will see when you play the game as the Predator

This shows the thermal imaging view. Your other options are passive infrared and UV vision

Soon the online world will be reverberating with the screams of a million dying marines



If you play the game as a marine, you're going to need all your wits about you to cope with the barrage of nastiness

Night-time vision will help you find goodies to make your life easier

limited single player Doom clone. Now with the advance of PC technology, online gaming and 3D acceleration, the time for the ultimate Aliens vs Predator game is here.

Game over, man!

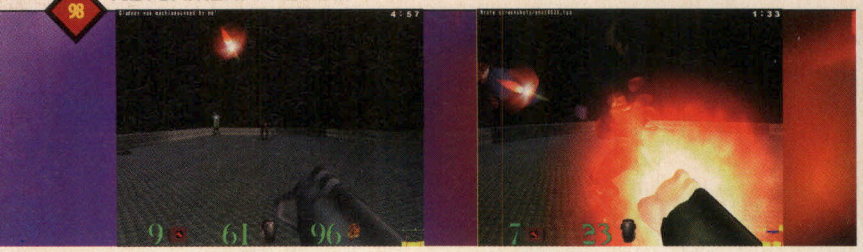
The game kicks off with race selection: Marine, Alien or Predator. Each has its own game objectives presented in cool video introductions. As Predator, you must rescue an injured member of your race, as Marine your base is attacked by Aliens and Predators, all you have to do is survive and escape while the Alien is trying to set up a nest.

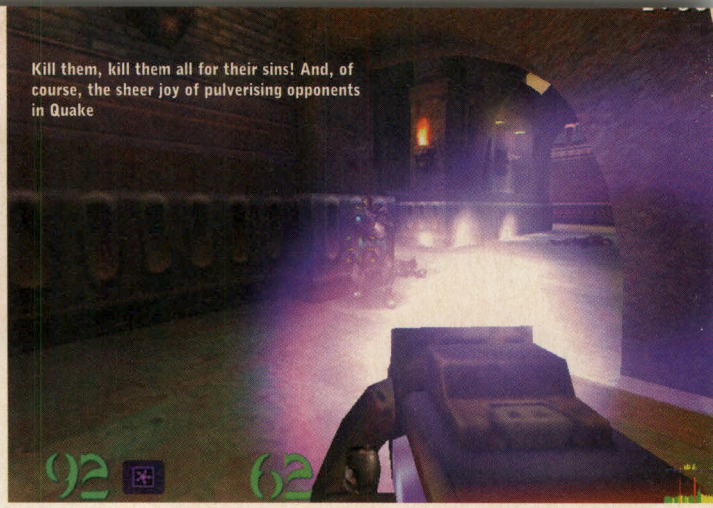
The Marine has the biggest selection of weapons and a few hi-tech toys like the motion detectors and infra red vision. The Predator can turn practically invisible, view the scene in multiple spectra and has some fearsome weapons of its own. The Alien is the speed-machine of the three and can climb walls and run along ceilings. Its weapons are limited to the tail, claws and jaws.

The game is spread over 40 different levels with loads of different environments, each with a high level of interactivity. There are 10 types of online mode including Species War, Deathmatch, Tag and Co-operative. Gameplay is pretty much like any other FPS – move, hunt, kill and advance are the main rules. Doors that must be opened to gain access to other areas hamper your advance. Most of the levels are familiar to *Alien* film fans – there are colonist bases, vast loading docks on space craft, narrow crawl spaces and plenty of new locations. Whichever race you play as, most levels are very dark, requiring the use of other modes of vision.

The marine can use either night vision or tracking device, but not both, so a degree of strategy is involved before you even start moving. With the sounds of dripping water, distant fighting, alien noises and other distractions, the whole game is geared to terrifying the pants off players. When flashing lights overwhelm the vision systems, from out of nowhere an alien will pop up, arms wide open and tail slashing, literally terrifying. Everything you dreamed of in an Alien game is here and the final version will no doubt be even better than the current build. Soon the online world will be reverberating with the screams of a million dying Marines, the roars of wounded Predators and the hiss of acid – marvellous!

PI





Kill them, kill them all for their sins! And, of course, the sheer joy of pulverising opponents in Quake

TESTING, TESTING...

Quake III Arena is leaking out the doors of id Software. Hooray!

To a worldwide wail of groans, the Quake III Arena test was released on 24 April, but for the Mac. Then, a few days later, it appeared for Linux machines while the Windows server software also sneaked out, but at the time of writing the test game still hasn't arrived on PC. Graeme Devine from id Software tried to silence the screaming hordes with the following, rather logical, point: "The test version of Quake 3 Arena is just that, a test, and as such we here at id software need to have some controls over it as we start to test it out publicly. Without these controls we cannot actively track and improve the product in a manageable manner.

"We wanted, and are eager to be completely "out there" on all platforms, but the OpenGL drivers the product needs for all the platforms are not yet finalised. We will release on the other platforms as soon as possible.

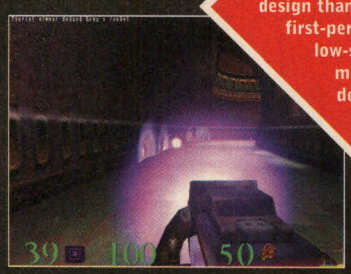
"We will rev the other platforms as we make new releases. I hope you understand and agree with this decision/process.

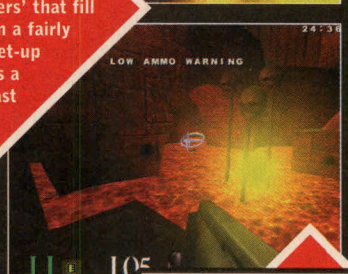
"It is a good step towards a timely release of the full demo and retail product."

Mac mayhem!

Fortunately our office is equipped with a nice Mac network and it was with some glee that our designers took time to test out the most eagerly awaited game in online history.

The comments following represent some of their opinions...





COMMENT

"Without the much-vaunted AI Bots to fight against, it's hard to judge how much of an advance QIII is in gameplay terms. But as a straight deathmatch, from the two levels seen so far in the test version, it's clear that there's a lot more time and imagination gone into the design than the usual 'bunch of corridors with monsters' that fill first-person shooters. The QIII Test is fast, even on a fairly low-spec PowerMac, and the familiar control set-up means players can go straight into battle. As a deathmatch game, QIII already seems at least the worryingly addictive equal of its predecessor – all we have to do now is wait for the final version to find out whether the promised innovations will work in play."

COMMENT

"Running on a beige G3/300, with rough tech code through beta OpenGL drivers, my first impressions were slightly worrying; a little slow, rough and with terrible lighting. Bugger. Things will be smoother in the final code, but for now, most gamers will have to tweak the graphics prefs a little. Booting it up on a blue and white/400 with the 128bit card – the hardware that this code is optimised for – I was a happier bunny. It rocks!"

There's no time for sentiment when you're in deathmatch mode – everyone's an enemy

COMMENT

"Although the version played was only a test/demo, it has to be said the graphics and audio effects are still superb. The two playable levels seem to be well thought out, and there are some really nice touches found throughout the game. The onscreen labelling of your targeted opponent is an excellent addition, and increases the tactical aspects of the game by a surprising degree."

As a straight deathmatch, it's clear that more time and imagination has gone into the design

WHAT'S IN THE TEST?

WHAT YOU'LL FIND IN QUAKE III

THE test version features two levels, one a rather traditional looking affair and the other a big open-spaced arena with jump pads carrying players from platform to platform. The weapons all seem somewhat familiar, although the balancing of them has yet to be completed. What you get is a chainsaw, machine gun, shotgun, plasma gun, grenade launcher, rocket launcher, railgun, lightning gun and the BFG.

Use your railgun to blast your opponents straight into the afterlife

Shake up the joint and make some noise, thanks to your powerful machine gun

COMMENT

"My initial response was 'Urrrgghh! It looks pants' but after playing the game for about 10 minutes I then thought 'hold on, this game's not too bad. At first, it seems to be similar to Quake II, but the lighting effects and player models are so much better. Unfortunately the sound doesn't seem to be as good, but then again, it's just a test. Overall, I think that it's going to be a fantastic game and I can't wait to play the final version."

The action in Quake III is even more fast and furious than any ready money round of *Catchphrase*

COMMENT

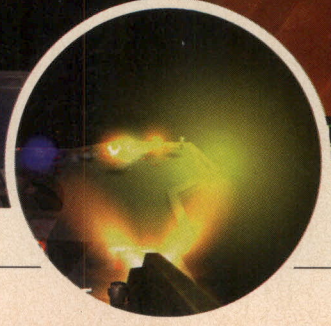
"Running across the Net, with a 33k connection, the first thing that struck me was the speed. Even with quite a high ping, I was still holding my own, none of the usual jumping and lag. All in all, nice. Graphically the 128-bit card makes all the difference, we're looking at all the eye-candy of Unreal, but with the trademark dirt that always made the Quake series a little nastier. The model animation is top; the way the head leads the rest of the body is even a little eerie at times. Although the old moon-walking problem is still a little evident, the backflip more than makes up for it, even if you don't see the effect for yourself. The maps that ship with the test are really nice: q3test1 gives you the kind of level you expect from Quake – better than a lot of the Quake II maps actually – it's very reminiscent of the really cool lava maps in the original game. The second map, q3test2, hopefully gives us a little taste of what's to come – jump pads giving us the feel of the beloved rocket jump but without the grisly consequences of bad timing. It's this kind of imaginative level design that could give Quake III Arena the edge against the likes of Unreal Tournament."

The beta version of Quake III takes you into a world that is like some twisted Roman vision – only without the lions

Simply get your opponent in your target square, and blast them away with the railgun

And another one bites the dust. Well, sort of explodes in a fiery, fragged mass, but you get the idea

Up close and personal, but not for long

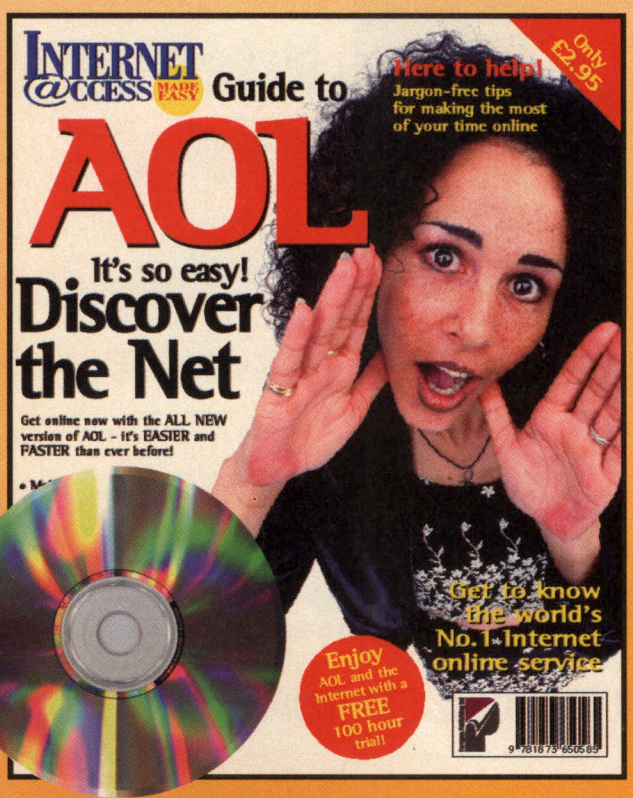


COMMENT

"All in all things are looking good – both for the eager public and the growing number of Mac gamers. Yeah okay, we may be a little smug at playing it first, but we're allowed to gloat a little, aren't we?"

Your key to AOL and the Internet

Getting onto AOL and the Net has never been easier thanks to this new guide from the makers of Internet Access Made Easy. The Internet Access Guide to AOL is an easy introduction to the world's biggest – and Britain's fasting growing – online service, and comes complete with a CD-ROM offering 100 FREE hours on AOL!



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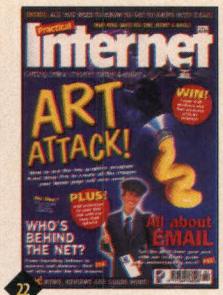

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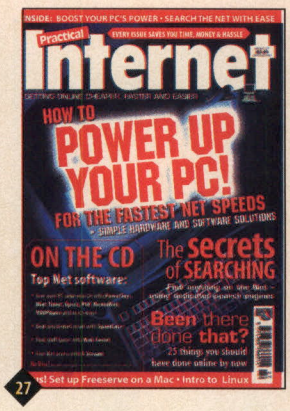

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Free for all!

There are so many free ISPs, we wanted to make sure you weren't missing out. So here's the definitive round up of free providers. Let us know what you think of them

Over the last year, a bewildering array of free service providers has sprung up and it seems more are arriving by the hour. So how do you choose between them? To give you a helping hand, we've listed the vital info to give you a better idea of what they offer.

Many of the free ISPs make their money by receiving a small percentage of the phone charges from BT, so it's in their interests to get you online quickly and keep you there. The cost of the tech support phone lines is a crucial factor if you're a newcomer to the Net, and prices range from the cost of a national call to a painful £1 a minute. Unless we've stated otherwise, the ISPs listed here offer access to the Internet at local call rates throughout the UK.

If you intend to use email regularly, it's a good idea to choose an ISP that provides POP3, rather than Web-based, mail. With POP3 mail you can collect and send your mail quickly and then log off the Net to read and reply offline. On the other hand, Web-based email is very useful if you need to be able to check your email from different PCs. If you can get both from your service provider – even better.

But although a provider may look good on paper, a crucial factor is how reliable and fast it is. After all, there's no point in having an unlimited amount of Web space and email addresses for every nickname you've ever had, if you're faced with engaged tones every time you try to connect. So once you've narrowed your selection down to a few that look good, try them out. Some ISPs allow online sign-up, which means you could have your account in a few minutes. And most of the ISPs will run happily alongside each other, so feel free to have a few in your Dial-up Networking box. You can use a program like AnySpeed to compare the ISPs' connections speeds. If you're paying good money for a traditional ISP, you could have one or two free ISPs as emergency backup. And if your free accounts prove reliable and fast, perhaps it's time to ditch that old paid-for service.

The free ISP business is moving so quickly that it can be hard to keep up, so learn from other Net users' by checking out the **alt.internet.providers.uk.free** newsgroup, which currently gets around a dozen postings a day. And if your free ISP doesn't carry this newsgroup, try another – it's a free lunch.

TOPTIP

If you want to know more about your free ISPs, try using Neotrace (http://www.neoworx.com). You'll find out what backbone supplier they are using and the route your Web requests take.

INFO

If you just can't get enough of free ISPs, there are a number of online resources that can help you find new providers. Try Free Internet Central at http://www.etheridge.freeserve.co.uk/freei/index.htm.

THEY'RE FREE!

FOR MORE INFORMATION, SEE...

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Free for all!

Aardvaak

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Is there an initial set-up fee?
No

What modem protocols do you support?
K56Flex, x2 and V.90, and ISDN at 64 and 128kbps

How many email addresses do I get?
None. You'll have to take advantage of a Web-based email firm such as Hotmail (http://www.hotmail.com)

And what about newsgroups?
None of those either, unfortunately

I'd like to create my own Web site. Do I get anywhere to put it?
You're out of luck – there's no space

If I get stuck, who do I call?
There's no number for tech support – this is strictly a service for people who know what they're doing

Can I get help by email or by looking at your Web site?
Unfortunately, there's no email help. The Web page contains details on how to set up the Dial-up Networking connection, nothing more, nothing less

I've got a Mac – can I get specialised technical support?
Again, there's no technical support

If I don't use my account for a while, how long will it be before you disconnect me?
You'll be removed after 30 days, but you can re-apply

OK, I'm interested. How do I go about getting an account?
Sign up at the Web page

Is it possible for me to sign up at the Web site?
Yes, there's no CD available. Just go to the site and follow the instructions

Do you require caller line identification?
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Service provider:	Aardvaak
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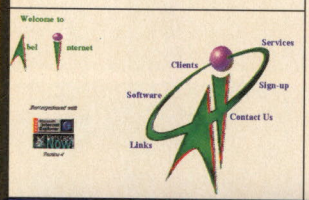

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If I get stuck, who do I call?
The tech support line (0906 680 4444)

Can I get help by email or by looking at your Web site?
You can get help by email and from the Web address

I've got a Mac – can I get specialised technical support?
Yes you can, and Abel also provide Amiga software

If I don't use my account for a while, how long will it be before you disconnect me?
You'll be disconnected after three months

OK, I'm interested. How do I go about getting an account?
All you have to do is phone 0131 445 5555 for the software

Is it possible for me to sign up at the Web site?
Yes you can

Do you require caller line identification?
No, you don't need it.

Service provider:	Abel Internet
Web site:	http://www.abel.net.uk
General enquiries:	See Web site

Arsenal

THE ARSENAL FC SERVICE WAS SET UP ON 20 DECEMBER 1998 AND CAN BE ACCESSED THROUGH THE ARSENAL HOME PAGE. IF YOU SIGN ON THE DOTTED LINE, YOU'LL GET AN ARSENAL FC EMAIL ADDRESS, WHICH YOU'LL EITHER LOVE OR HATE

Is there an initial set-up fee?
No, it's free

What modem protocols do you support?
K56Flex and V.90 are supported, but not x2. There's also single user 64kbps ISDN

How many email addresses do I get?
You can have up to five separate POP3 accounts

And what about newsgroups?
There are "loads of newsgroups," we're told

I'd like to create my own Web site. Do I get anywhere to put it?
You get 5Mb of space, which you are free to use for business

If I get stuck, who do I call?
The tech support line (0906 553 5209) is open 9am to 10pm, seven days a week. Calls cost 50p per minute

Can I get help by email or by looking at your Web site?
You can get email help – you should get a next day reply. There are FAQs on the Web page

I've got a Mac – can I get specialised technical support?
The CD doesn't contain Mac software; but the tech support line can assist you

If I don't use my account for a while, how long will it be before you disconnect me?
You'll be given the red card at 60 days

OK, I'm interested. How do I go about getting an account?
You can get the Arsenal CD by phoning 0171 704 2020, or by popping into the Gunners' shop.

Is it possible for me to sign up at the Web site?
You can also download the software from the Web site

Do you require caller line identification?
Yes

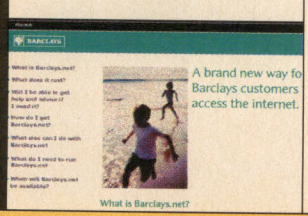
Service provider:	AFCi Connect
Web site:	http://www.arsenal.co.uk
General enquiries:	0171 704 2020

Barclays

BARCLAYS HAS TAKEN TO THE SERVICE PROVIDER MARKET OFFERING ITS CUSTOMERS FREE INTERNET ACCESS ALONG WITH SOME EXCELLENT ONLINE BANKING FACILITIES

Is there an initial set-up fee?
No, it's completely free

What modem protocols do you support?
K56Flex and V.90 are supported, but you're out of luck if you have an ISDN



How many email addresses do I get?
Barclays gives you five email accounts with your service

And what about newsgroups?
You can access all the usual newsgroups

I'd like to create my own Web site. Do I get anywhere to put it?
There's no Web space provided at the moment

If I get stuck, who do I call?
There are plans for technical support, but as yet, the number is unavailable. When it is available, the help desk will be open from 8am until midnight seven days a week

Can I get help by email or by looking at your Web site?
There will be support available online

I've got a Mac – can I get specialised technical support?
Mac users will have to wait a little while

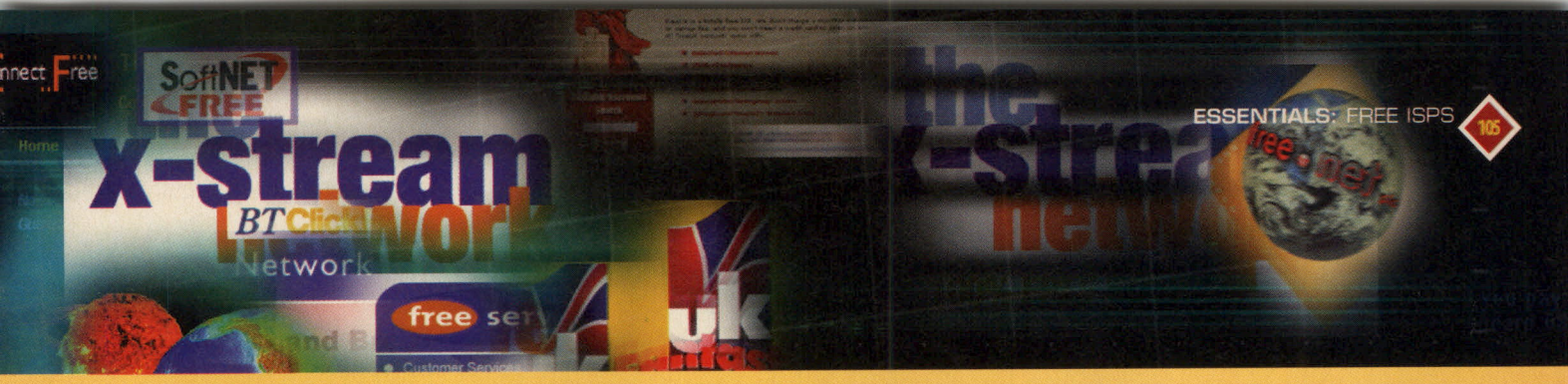
If I don't use my account for a while, how long will it be before you disconnect me?
There are no plans to disconnect users

OK, I'm interested. How do I go about getting an account?
To get an account, you can either go to the Barclays.net Web site for further information, or phone 0800 494949 to be sent an installation CD

Is it possible for me to sign up at the Web site?
Yes, you can also sign up at the Web site

Do you require caller line identification?
No

Service provider:	Barclays.net
Web site:	http://www.is.barclays.co.uk
General enquiries:	0171 699 5000



bigwig

ODDLY NAMED BIGWIG HAS BEEN OFFERING A FREE SERVICE SINCE OCTOBER 1998 AND HAS ABOUT 2,500 SUBSCRIBERS. THE PEOPLE AT BIGWIG TOLD US THAT THEY EMPHASISE THE POSITIVE SIDE OF THE INTERNET BY POINTING CUSTOMERS TO THE BEST STUFF ON THE NET

Is there an initial set-up fee?
No

What modem protocols do you support?
K56Flex, x2 and V.90. Also ISDN at 64 and 128kbps

How many email addresses do I get?
Seven POP3 accounts, each with up to 1,000 aliases, as well as IMAP email

And what about newsgroups?
There's access to about 25,000 newsgroups, and about five devoted to bigwig

I'd like to create my own Web site. Do I get anywhere to put it?
You get 15Mb of space. Business use is allowed

If I get stuck, who do I call?
Dial 0906 960 2415. It's open 24-hours a day, seven days a week. Calls costs £1 per minute

Can I get help by email or by looking at your Web site?
Email support takes 24 hours, or up to 2.5 days for complex queries. The site contains info on how to set up your account

I've got a Mac – can I get specialised technical support?
You can access Mac software from the CD, and the tech support team provides support for Macs

If I don't use my account for a while, how long will it be before you disconnect me?
You get a warning email after 90 days

OK, I'm interested. How do I go about getting an account?
Get the CD by ringing 0870 740 1033. The CD contains IE 4.01 and Netscape 4, and some Mac software

Is it possible for me to sign up at the Web site?
Yes you can

Do you require caller line identification?
Yes

Service provider:	bigwig
Web site:	http://www.bigwig.net
General enquiries:	0870 740 1033

breathe net

BREATHE NET HAS BEEN PROVIDING FREE ACCESS SINCE DECEMBER 1998 AND THE CD IS AVAILABLE BY ORDERING ONLINE. IT HAS ALSO TEAMED UP WITH TOYS 'R' US TO PRODUCE CDS THAT YOU CAN PICK UP IN THE TOY SHOP

Is there an initial set-up fee?
No, it's free

What modem protocols do you support?
K56Flex and V.90, but not x2. There's also 64kbps ISDN

How many email addresses do I get?
Five separate POP3 accounts

And what about newsgroups?
There's almost full Usenet access – only extreme newsgroups are censored

I'd like to create my own Web site. Do I get anywhere to put it?
When you join breathe net, you get 10Mb of Web space available, but it's not for business use

If I get stuck, who do I call?
Call 09067 112209. It's open 24-hours, seven days a week. Calls cost 50p a minute

Can I get help by email or by looking at your Web site?
Yes, there's email help with a 24-hour response time. The Web page contains tutorials on using IE 4, Outlook Express and setting up Web space

I've got a Mac – can I get specialised technical support?
Mac software should be available in March and tech support will be able to help with any Mac problems

If I don't use my account for a while, how long will it be before you disconnect me?
30 days, but this policy is not strictly enforced

OK, I'm interested. How do I go about getting an account?
Ring 0800 783 7439 or go to the Web site. The CD contains IE 4, Outlook Express and a multimedia guide to the Net

Is it possible for me to sign up at the Web site?
No, you need the disc

Do you require caller line identification?
No

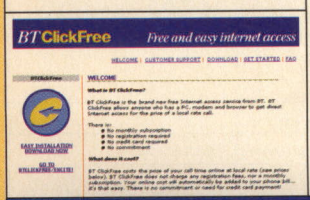
Service provider:	breathe net
Web site:	http://www.breathe.co.uk/breathenet
General enquiries:	0800 500150

BT ClickFree

THE BT CLICKFREE SERVICE WAS LAUNCHED IN FEBRUARY 1999 AND PROVIDES ACCESS FOR THE PRICE OF A LOCAL CALL. ITS PREDECESSOR, BT CLICK+, CHARGED THE USER FOR THE LOCAL PHONE CALL, PLUS AN ADDITIONAL 1P PER MINUTE

Is there an initial set-up fee?
No

What modem protocols do you support?
ClickFree supports K56Flex, but not x2 or V.90. There's also ISDN access at 64kbps



How many email addresses do I get?
Unlimited. And both Web-based and POP3 mailboxes are now available

And what about newsgroups?
No, there's no news server

I'd like to create my own Web site. Do I get anywhere to put it?
There's no Web space either

If I get stuck, who do I call?
The help desk number is 0906 302 0240 and is open from 8 am to midnight, seven days a week. Calls are charged at 50p per minute

Can I get help by email or by looking at your Web site?
The Web site has an FAQ list and you can email for help

I've got a Mac – can I get specialised technical support?
Yes, you can – once the Mac software is available, which should be this month

If I don't use my account for a while, how long will it be before you disconnect me?
You don't get disconnected

OK, I'm interested. How do I go about getting an account?
Download the ClickFree software from the Web site or call 0800 731 7887 for a CD. No registration details are required to set up the service

Is it possible for me to sign up at the Web site?
Yes, you can

Do you require caller line identification?
Yes

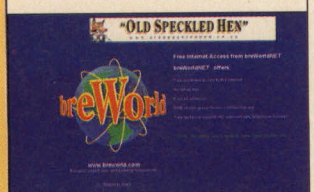
Service provider:	BT ClickFree
Web site:	http://www.btclickfree.com
General enquiries:	0800 731 7887

breWorld

A SERVICE PROVIDER THAT'S PERFECT FOR BEER LOVERS, BREWORLD NOT ONLY GIVES YOU ACCESS TO THE INTERNET, BUT GIVES YOU ALL THE LATEST BEER AND BREWING NEWS

Is there an initial set-up fee?
No, it's free for you to join

What modem protocols do you support?
The service supports K56Flex and V.90 modems



How many email addresses do I get?
breWorld supplies five email addresses with your account

And what about newsgroups?
You have access to the Web's newsgroups, as well as specialised beer groups

I'd like to create my own Web site. Do I get anywhere to put it?
You get 5Mb of space, but this can only be used for non-commercial use

If I get stuck, who do I call?
You will get free technical support, the details of which you'll get when you sign up

Can I get help by email or by looking at your Web site?
Yes, if you email info@breworld.net you'll be able to get some help. But there's no help at the Web site

I've got a Mac – can I get specialised technical support?
No, Mac users are out of luck

If I don't use my account for a while, how long will it be before you disconnect me?
You shouldn't be disconnected

OK, I'm interested. How do I go about getting an account?
There are three ways. The first is by buying the *Taste* magazine, which you should be able to get from larger newsagents. It comes with an installation CD. You can also pick up CDs from selected Old Speckled Hen outlets, and you can also apply for a CD at the Web site

Is it possible for me to sign up at the Web site?
No, you need the CD

Do you require caller line identification?
No

Service provider:	breWorld
Web site:	http://www.breworld.net
General enquiries:	0181 565 4279

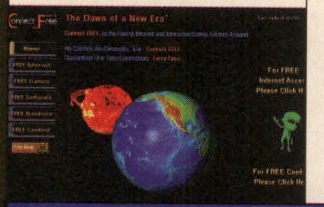
Free for all!

Connect Free

CONNECTFREE HAS SIGNED UP 51,000 CUSTOMERS SINCE IT'S LAUNCH IN JULY 1998. THERE'S NO CD WITH THIS SERVICE – USERS JUST SIGN UP AT THE WEB PAGE

Is there an initial set-up fee?
No, it's all free

What modem protocols do you support?
K56Flex, x2 and V.90. And you can get connected at 64 and 128kbps using ISDN



How many email addresses do I get?
Unlimited POP3 addresses

And what about newsgroups?
There's access to about 28,000

I'd like to create my own Web site. Do I get anywhere to put it?
None, but there are plans to provide unlimited space, so keep an eye on the Web site

If I get stuck, who do I call?
The 0890 900 0050 number is open 24-hours, seven days a week. The calls will set you back 50p per minute

Can I get help by email or by looking at your Web site?
Yes, there's email help. You should get a reply in three or four days. You can also find helpful information for PCs and Macs on the Web page

I've got a Mac – can I get specialised technical support?
Yes, you can

If I don't use my account for a while, how long will it be before you disconnect me?
You'll never be disconnected

OK, I'm interested. How do I go about getting an account?
There's no CD available, so just go to the Web page and sign up

Is it possible for me to sign up at the Web site?
You certainly can

Do you require caller line identification?
Yes

Service provider:	Connect Free
Web site:	http://www.connectfree.net
General enquiries:	0870 742 1111

Currantbun.com

THE SUN HAS BROUGHT ITS OWN SENSE OF HUMOUR AND FUN TO THE ISP MARKET. JOIN UP AND HAVE SOME FUN IN THE SUN!

Is there an initial set-up fee?
No, it's completely free

What modem protocols do you support?
The ususal K56Flex and V.90 models

How many email addresses do I get?
CurrantBun.com customers can revel in unlimited email addresses

And what about newsgroups?
Would you Adam and Eve it, there are loads of them, too

I'd like to create my own Web site. Do I get anywhere to put it?
Subscribers will get 25Mb of free Web space

If I get stuck, who do I call?
Yes, there is tech support for when you get stuck. 0845 660171 will get you an automated service at local rates while 0900 9191928 will get you a real person at a cost of 50p per minute

Can I get help by email or by looking at your Web site?
Yes, you can get help from the Web site. You can also email for help, simply address it to help@currantbun.com

I've got a Mac – can I get specialised technical support?
Yes, there's Mac support

If I don't use my account for a while, how long will it be before you disconnect me?
You shouldn't be disconnected

OK, I'm interested. How do I go about getting an account?
As you'd expect, details of the service will be printed in *The Sun*. If you miss this, you can always call 0845 306 3636 to be sent you free CD-ROM

Is it possible for me to sign up at the Web site?
No, if you want to join Currantbun.com, you need the CD-ROM

Do you require caller line identification?
No

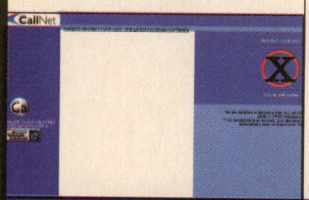
Service provider:	CurrantBun.com
Web site:	http://www.currantbun.com
General enquiries:	0845 306 3636

CallNet

CALLNET HAS BEEN TRADING SINCE NOVEMBER 1998. THE FREE SERVICE INCLUDES 20MB OF WEB SPACE AND – GASP! – TECH SUPPORT IS ONLY CHARGED AT NATIONAL CALL RATES

Is there an initial set-up fee?
No, there's no charge

What modem protocols do you support?
K56Flex, x2 and V.90, and 128kbps ISDN



How many email addresses do I get?
An unlimited number of POP3 addresses

And what about newsgroups?
There's "full Usenet access"

I'd like to create my own Web site. Do I get anywhere to put it?
You get 20Mb of space. Unfortunately, business use is not allowed

If I get stuck, who do I call?
The telephone support number is 0870 010 2799, open 24-hours, seven days a week. Calls are charged at national rate

Can I get help by email or by looking at your Web site?
There's email help. CallNet aims to reply the same day. The Web site contains details on managing the account and using Web space

I've got a Mac – can I get specialised technical support?
At the time of writing, support was being prepared, so check with CallNet for details

If I don't use my account for a while, how long will it be before you disconnect me?
Never

OK, I'm interested. How do I go about getting an account?
To get the CD visit the Web site or give the tech support number a ring. The CD contains IE 4

Is it possible for me to sign up at the Web site?
Yes, you can find out more on the Web page

Do you require caller line identification?
No

Service provider:	CallNet
Web site:	http://www.callnetuk.com
General enquiries:	0870 010 2799

Dabsol

DABSOL IS BACKED BY THE DABS DIRECT COMPUTER COMPANY AND HAS BEEN TRADING SINCE AROUND CHRISTMAS TIME. AS ITS WEB SITE SAYS: "DON'T MAKE SURE YOU HAVE YOUR CREDIT CARD DETAILS TO HAND – YOU WON'T NEED THEM!"

Is there an initial set-up fee?
No, it's free

What modem protocols do you support?
x2, V.90 and ISDN at 64kbps are supported

How many email addresses do I get?
Five password-protected POP3 accounts, and unlimited aliases

And what about newsgroups?
There are about 34,000, and eight or nine newsgroups specific to Dabsol

I'd like to create my own Web site. Do I get anywhere to put it?
There's unlimited Web space which can be used for business

If I get stuck, who do I call?
Ring 0890 994 0000 (7am to midnight, seven days a week). Calls cost 49p per minute from 8am to 6pm, Monday to Friday and 39p at other times

Can I get help by email or by looking at your Web site?
You'll get an email reply within three days. The Web site contains details on how to set up the account for PCs and Macs, and how to set up email in Outlook and Netscape

I've got a Mac – can I get specialised technical support?
There's no over-the-phone help

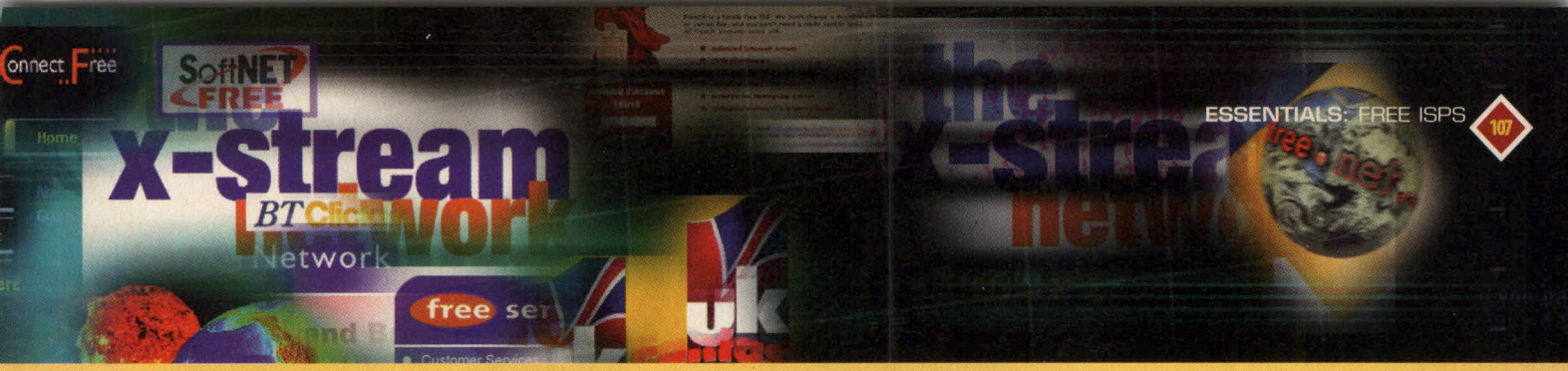
If I don't use my account for a while, how long will it be before you disconnect me?
After 30 days

OK, I'm interested. How do I go about getting an account?
There should be a CD by the time you read this, or just sign up at the Web page

Is it possible for me to sign up at the Web site?
Yes, you can get the details from the Web site

Do you require caller line identification?
Yes

Service provider:	Dabsol
Web site:	http://www.dabsol.co.uk
General enquiries:	No number

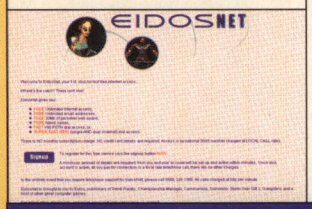


Eidos Net

THE COMPANY THAT BROUGHT YOU LARA CROFT HAS ALSO TURNED ITS HAND TO PROVIDING FREE NET ACCESS

Is there an initial set-up fee?
No

What modem protocols do you support?
V.90, single and dual ISDN



How many email addresses do I get?
You get unlimited email addresses

And what about newsgroups?
There's a free newsgroup server

I'd like to create my own Web site. Do I get anywhere to put it?
You get 20Mb of Web space

If I get stuck, who do I call?.
The help desk number is 0906 326 3366. Calls are charged at 50p per minute

Can I get help by email or by looking at your Web site?
Yes, address your email queries to support@eidosnet.co.uk

I've got a Mac – can I get specialised technical support?
Yes you can, there's a section on the Web site

If I don't use my account for a while, how long will it be before you disconnect me?
You'll get disconnected after 30 days

OK, I'm interested. How do I go about getting an account?
There are two ways of getting an account. The first is to visit the Eidos Web site at http://www.eidosnet.co.uk. Alternatively, the service is offered with PC CD-ROM-based games

Is it possible for me to sign up at the Web site?
Yes, you can

Do you require caller line identification?
Yes

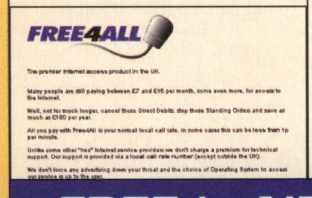
Service provider:	Eidos
Web site:	http://www.eidos.co.uk
General enquiries:	0906 326 3366

Free4All

FREE4ALL HAS BEEN OFFERING FREE INTERNET ACCESS SINCE 4 JANUARY 1999. IT HAD ABOUT 5,000 USERS WHEN WE RANG THEM, BUT 30 MINUTES LATER ANOTHER 75 CUSTOMERS HAD SIGNED UP

Is there an initial set-up fee?
Nope

What modem protocols do you support?
x2 and V.90, but not K56Flex. And ISDN at 64 and 128kbps



How many email addresses do I get?
Unlimited POP3 accounts

And what about newsgroups?
Users have access to about 45,000 newsgroups, and two devoted to Free4All

I'd like to create my own Web site. Do I get anywhere to put it?
There's 10Mb up for grabs, which you can use for business

If I get stuck, who do I call?
Call 0845 301 1670, 8am to 12 midnight, seven days a week. It's a local rate number.

Can I get help by email or by looking at your Web site?
You can get email help, and once you start a query, you always 'talk' to the same person. The Web page contains info for dial-up connections, Mac info and FAQs

I've got a Mac – can I get specialised technical support?
Yes, there is support

If I don't use my account for a while, how long will it be before you disconnect me?
Never, only for misuse

OK, I'm interested. How do I go about getting an account?
Phone 01303 775500 for the CD. It includes IE 4, Netscape Communicator 4.5, Opera, Delta, Eudora Light and Pegasus (although some is shareware or trial software)

Is it possible for me to sign up at the Web site?
Yes, you can

Do you require caller line identification?
Yes

Service provider:	Free4All
Web site:	http://www.free4all.co.uk
General enquiries:	01303 775500

FREEdotNET

FREEDOTNET OPENED ITS DOORS FOR FREE ISP BUSINESS ON 4 JANUARY 1999 ALTHOUGH AS AN ISP IT'S BEEN AROUND A LOT LONGER THAN THAT. ITS WEB SITE CONTAINS CONTENT IN THE FORM OF NEWS AND WEATHER

Is there an initial set-up fee?
No, there's no fee

What modem protocols do you support?
K56Flex and V.90, but not x2 or ISDN

How many email addresses do I get?
Five POP3 accounts

And what about newsgroups?
There's access to about 34,000 newsgroups and two specific to FREEdotNET

I'd like to create my own Web site. Do I get anywhere to put it?
You get 2Mb, but you have to pay £10 a year for it. Business use is not allowed

If I get stuck, who do I call?
You can get support at national rate call charges 9.30am to 5.30pm Monday to Friday, but not at the weekends. The tech support number is given to you when you sign up

Can I get help by email or by looking at your Web site?
You can get email help – replies should take a day or two. The Web page contains FAQs and newsheets

I've got a Mac – can I get specialised technical support?
Yes

If I don't use my account for a while, how long will it be before you disconnect me?
You won't be disconnected

OK, I'm interested. How do I go about getting an account?
Ring 0181 636 7100 to get a form which you have to sign and return. Your CD will then be posted to you

Is it possible for me to sign up at the Web site?
Yes, but first you need to ring 0181 636 7100 to get the details

Do you require caller line identification?
No

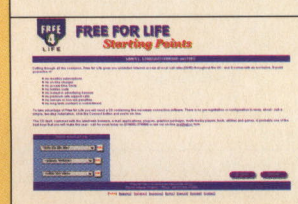
Service provider:	FreedotNet
Web site:	http://www.thefree.net
General enquiries:	0181 636 7100

Free for Life

FREE FOR LIFE IS A SERVICE PROVIDED IN THE UK BY PRIMEX INTERNET SOLUTIONS. THIS IS ONE OF THE FEW FREE SERVICES WITH A ONE-OFF SET-UP FEE

Is there an initial set-up fee?
Yes, there's a £30 charge for the CD and administration

What modem protocols do you support?
K56Flex and x2 are supported. You can also use the speedy 128kbps ISDN



How many email addresses do I get?
None

And what about newsgroups?
There's no news server

I'd like to create my own Web site. Do I get anywhere to put it?
You're out of luck. There's no Web space either

If I get stuck, who do I call?
Tech support can be reached on 01908 377707, 9am to 9pm, seven days a week. Calls are charged at national call rates (or local if you live in Milton Keynes)

Can I get help by email or by looking at your Web site?
Yes, you should get an email reply within 24-hours.

I've got a Mac – can I get specialised technical support?
Yes, they have Macs at tech support

If I don't use my account for a while, how long will it be before you disconnect me?
There's no definite policy

OK, I'm interested. How do I go about getting an account?
Ring the sales team on 01908 378 999 for the CD (remember, you'll need £30 on your credit card), or order it over the Web site. The CD contains IE 4, Netscape Navigator and Communicator, and also MediaRing Talk

Is it possible for me to sign up at the Web site?
Yes, but you pay £30

Do you require caller line identification?
Yes

Service provider:	Free for Life
Web site:	http://www.freeforlife.co.uk
General enquiries:	01908 378 999

Free for all!

FreeNet

FREENET HAS SIGNED UP 50,000 CUSTOMERS SINCE IT LAUNCHED ITS FREE SERVICE IN AUGUST 1998. THERE'S NO CD FOR THIS SERVICE – YOU JUST SIGN UP AT THE WEB PAGE

Is there an initial set-up fee?
No, there isn't

What modem protocols do you support?
K56Flex, x2 and V.90. And there's 64 and128kbps ISDN

How many email addresses do I get?
Unlimited POP3 mail accounts

And what about newsgroups?
There's access to around 30-35,000 newsgroups

I'd like to create my own Web site. Do I get anywhere to put it?
You get 10Mb for personal or business use

If I get stuck, who do I call?
The telephone support number is 0900 9000 500 and costs 50p per minute. Lines are open 9am to 6pm Monday to Saturday and 10am to 5.30pm on Sundays

Can I get help by email or by looking at your Web site?
Yes, there's help via email. They aim to reply to queries within two days. The Web page contains details of settings and a DUN walkthrough

I've got a Mac – can I get specialised technical support?
There's no specific technical support for Macs

If I don't use my account for a while, how long will it be before you disconnect me?
You'll never be disconnected

OK, I'm interested. How do I go about getting an account?
There's no CD, so sign up at the Web page

Is it possible for me to sign up at the Web site?
Yes, sign up at the Web page and use the details to set up DUN yourself

Do you require caller line identification?
No

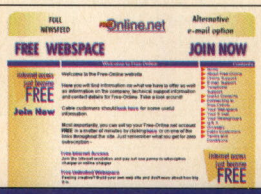
Service provider:	FreeNet
Web site:	http://www.freenet.co.uk
General enquiries:	Ring tech support

Free-Online

FREE-ONLINE LAUNCHED IN OCTOBER 1998 AND HAS SIGNED UP 75,500 USERS. IT OFFERS UNLIMITED AMOUNTS OF WEB SPACE – GREAT FOR GREEDY WEBWEAVERS

Is there an initial set-up fee?
No, it's all free

What modem protocols do you support?
x2 and V.90, but not K56Flex. You can also use ISDN at 64kbps



How many email addresses do I get?
Unlimited POP3 accounts

And what about newsgroups?
32,000, but there are plans to expand this to 56-57,000. There are five newsgroups devoted to Free-Online

I'd like to create my own Web site. Do I get anywhere to put it?
Unlimited space – you get a 100Mb chunk at first, but when you fill it up, you can get another chunk. There's no limits, and it's OK to use the space for business use

If I get stuck, who do I call?
Call 0890 998 8776 for tech support, 7am to midnight, seven days a week. Calls cost 39p per minute off peak, 49p per minute peak

Can I get help by email or by looking at your Web site?
There's email help – you should get a reply in 24 hours. The Web page contains info on how to set up your account and FAQs

I've got a Mac – can I get specialised technical support?
There's a page on the Web site telling you how to get online with a Mac

If I don't use my account for a while, how long will it be before you disconnect me?
30 days

OK, I'm interested. How do I go about getting an account?
Ring 0870 706 0504 for a CD containing

Is it possible for me to sign up at the Web site?
Yes, just sign on at the Web site

Do you require caller line identification?
Yes

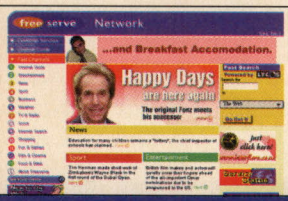
Service provider:	Free-Online
Web site:	http://www.free-online.net
General enquiries:	0870 7060 504

Freeserve

LAUNCHED BACK IN SEPTEMBER 1998, FREESERVE IS THE BEST KNOWN AND MOST POPULAR FREE ISP, WITH OVER ONE MILLION ACCOUNTS. JUST IN CASE YOU'VE BEEN OUT OF THE COUNTRY FOR WHILE, FREESERVE IS BACKED BY DIXONS

Is there an initial set-up fee?
No

What modem protocols do you support?
Freeserve supports V.90. K56Flex and x2 modems will get access at a maximum speed of 33kbps. Freeserve customers can use ISDN at 128kbps



How many email addresses do I get?
Unlimited POP3 email addresses

And what about newsgroups?
There's access to about 31,000 newsgroups. There are about 19 devoted to Freeserve

I'd like to create my own Web site. Do I get anywhere to put it?
There's 15Mb of space to be had. Business use is allowed

If I get stuck, who do I call?
Call 0839 517517, open 24-hours, seven days a week. Calls cost 50p per minute

Can I get help by email or by looking at your Web site?
There are nine different email addresses, each covering a specific type of problem. If you send an email you receive a standard fact sheet. The Web page contains detailed 'how-to' guides, FAQs and a glossary

I've got a Mac – can I get specialised technical support?
There's no Mac support

If I don't use my account for a while, how long will it be before you disconnect me?
After 30 days the account is suspended, but the user has 10 days to reactivate their account

OK, I'm interested. How do I go about getting an account?
The CD can be picked up from Dixons, Currys, PC World and The Link. The CD contains IE 4 and Outlook Express

Is it possible for me to sign up at the Web site?
No, you have to use the CD

Do you require caller line identification?
Yes

Service provider:	Freeserve
Web site:	http://www.freeserve.co.uk
General enquiries:	0990 500049

FreeUK

FREEUK IS ANOTHER NEW FREE PROVIDER – IT STARTED UP IN FEBRUARY 1999. THE SERVICE OFFERS USERS 25MB OF WEB SPACE AND 24-HOUR TECHNICAL SUPPORT

Is there an initial set-up fee?
No, it costs nothing

What modem protocols do you support?
Only V.90 is supported, so you'll be connecting at a maximum of 33.6k with x2 and K56Flex modems. There's also 64kbps ISDN access

How many email addresses do I get?
Unlimited POP3 addresses

And what about newsgroups?
There's access to about 37,000, and there are four devoted to FreeUK

I'd like to create my own Web site. Do I get anywhere to put it?
There's 25Mb of Web space. Business use is allowed

If I get stuck, who do I call?
Telephone support is at 0900 900 0999, open 24-hours, seven days a week, charged at 50p per minute

Can I get help by email or by looking at your Web site?
Email help is available and the Web page contains details on setting up Outlook Express, using FTP, and a guide to Dial-Up Networking

I've got a Mac – can I get specialised technical support?
There's a Mac set-up wizard on the Web page, and FreeUK will try to help with Mac connections

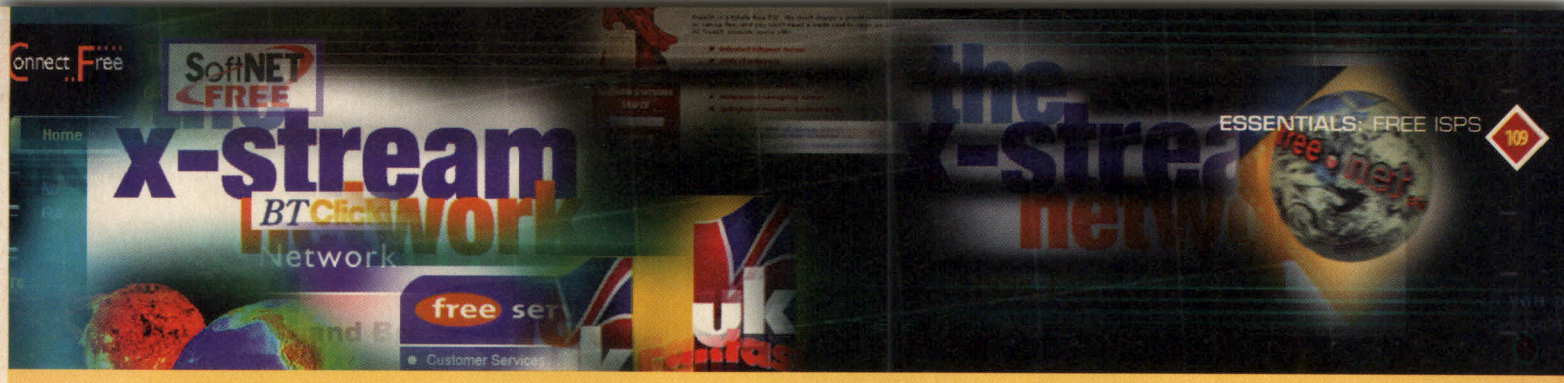
If I don't use my account for a while, how long will it be before you disconnect me?
90 days

OK, I'm interested. How do I go about getting an account?
There's no CD, so go to the Web page and sign up

Is it possible for me to sign up at the Web site?
Yes, once you've got the details from the Web page

Do you require caller line identification?
Yes

Service provider:	FreeUK
Web site:	http://www.freeuk.com
General enquiries:	0900 900 0900 (50p per minute)



Freewire

FREEWIRE OFFERS AN EXCELLENT INTERNET ACCESS FACILITY, AND WILL CERTAINLY APPEAL TO HOME PAGE ENTHUSIASTS, BECAUSE IT OFFERS 50MB OF WEB SPACE

Is there an initial set-up fee?
No, people who want to use the Freewire service can do so without having to pay anything

What modem protocols do you support?
Anything up to V.90 is supported

How many email addresses do I get?
You will recieve unlimited email accounts

And what about newsgroups?
Currently there are around 40,000 newsgroups for you to enjoy

I'd like to create my own Web site. Do I get anywhere to put it?
There's a whopping 50Mb of Web space available to you

If I get stuck, who do I call?
If you find that you are having problems, you can contact the technical support staff on 0906 716 0550

Can I get help by email or by looking at your Web site?
Yes, you can get free email help

I've got a Mac – can I get specialised technical support?
Unfortunately, there's no support for Mac users, although the service is available to Mac users

If I don't use my account for a while, how long will it be before you disconnect me?
You won't be disconnected if you don't use the service for a while

OK, I'm interested. How do I go about getting an account?
If you want an account, you sign up at the Web site – http://www.freewire.net

Is it possible for me to sign up at the Web site?
Yes, in fact, it's the only way to sign up

Do you require caller line identification?
No, but may change

Service provider:	Freewire
Web site:	http://www.freewire.net
General enquiries:	No number

FreeZone

FREEZONE STARTED A FREE SERVICE IN JANUARY THIS YEAR, SO IT'S A LITTLE EARLY TO SAY HOW MANY SUBSCRIBERS IT HAS. THE PEOPLE AT FREEZONE TOLD US THEY WERE COMMITTED TO PROVIDING QUALITY SUPPORT BY PHONE AND ON THE WEB

Is there an initial set-up fee?
No

What modem protocols do you support?
K56Flex, x2 and V.90. And ISDN at 64 and 128kbps

How many email addresses do I get?
Unlimited POP3 mail

And what about newsgroups?
There's access to over 30,000 newsgroups. There are none specific to FreeZone

I'd like to create my own Web site. Do I get anywhere to put it?
You get 20Mb of space. Business use is allowed

If I get stuck, who do I call?
The tech support number is 0906 300 1111, open 9am to 10pm, seven days a week. It costs 50p per minute

Can I get help by email or by looking at your Web site?
At the time of writing there was no email help and the Web site was very basic. As the service is so new, this could well change

I've got a Mac – can I get specialised technical support?
Freezone intends to provide info on its Web pages

If I don't use my account for a while, how long will it be before you disconnect me?
So far, no one's been disconnected

OK, I'm interested. How do I go about getting an account?
Ring 0870 744 1111 for a CD containing IE 4.01. There's no software to download from the site at the moment.

Is it possible for me to sign up at the Web site?
Yes, just sign up on the Web

Do you require caller line identification?
No

Service provider:	FreeZone
Web site:	http://www.freezone.co.uk
General enquiries:	0870 744 1111

IAX

THE INTERNET ALLIANCE EXCHANGE, OR IAX, HAS BEEN IN BUSINESS AS A FREE ISP SINCE SEPTEMBER 1998. THIS IS ANOTHER SERVICE DESIGNED FOR ONLINE SIGN-UP – THERE'S NO CD AVAILABLE

Is there an initial set-up fee?
No

What modem protocols do you support?
K56Flex, V.90 and 64kbps ISDN

How many email addresses do I get?
One POP3 mail account with unlimited aliases

And what about newsgroups?
The IAX user has access to 34,000 newsgroups

I'd like to create my own Web site. Do I get anywhere to put it?
Yes, you get 5Mb of Web space for both your personal or business use

If I get stuck, who do I call?
When we checked, tech support was charged at a national call rate on 01932 403020, open 8am to 8pm Monday to Friday, 9am to 1pm Saturday and Sunday. However, it's expected that it will switch to a 50p per minute number in March

Can I get help by email or by looking at your Web site?
You should receive a reply to your email within 24-hours. At the time of writing there was no help on the Web page

I've got a Mac – can I get specialised technical support?
Yes, IAX does support the Mac

If I don't use my account for a while, how long will it be before you disconnect me?
Never

OK, I'm interested. How do I go about getting an account?
There's no CD, so go to the site and fill in the form. IAX will send you an email with connection info

Is it possible for me to sign up at the Web site?
Yes, you can

Do you require caller line identification?
No

Service provider:	IAX
Web site:	http://www.iax.net
General enquiries:	01932 403020

in fin net

THIS COMPANY NOT ONLY OFFERS YOU FREE INTERNET ACCESS, IT IS ALSO AN INVESTMENT INFORMATION SERVICE. THIS ALLOWS YOU TO CONSULT THE EXPERTS ON A WIDE RANGE OF MONEY MATTERS

Is there an initial set-up fee?
No

What modem protocols do you support?
K56Flex, x2 and V.90

How many email addresses do I get?
Unlimited email addresses with five mailboxes per address

And what about newsgroups?
You get newsgroups, too

I'd like to create my own Web site. Do I get anywhere to put it?
You get 20Mb of Web space

If I get stuck, who do I call?.
Telephone support will soon be available

Can I get help by email or by looking at your Web site?
Yes, there's a support section on the Web site as well as details of the email support

I've got a Mac – can I get specialised technical support?
Not at the moment, but there are plans to introduce Mac support soon

If I don't use my account for a while, how long will it be before you disconnect me?
If you don't use your account within 30-days, you will be disconnected

OK, I'm interested. How do I go about getting an account?
You sign up online. Visit the in fin net Web site at http://www.infinnet.co.uk

Is it possible for me to sign up at the Web site?
Yes you can. Simply phone 0845 301 1504 to get all the details for setting up Dial-up Networking

Do you require caller line identification?
No

Service provider:	in fin net
Web site:	http://www.infinnet.co.uk
General enquiries:	No number

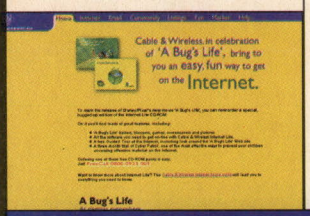
Free for all!

Internet Lite

INTERNET LITE IS THE FREE SERVICE FROM CABLE & WIRELESS. THE SERVICE HAS BEEN AROUND SINCE THE END OF OCTOBER 1998 AND HAS AROUND 20,000 CUSTOMERS

Is there an initial set-up fee?
Yes, it's £10

What modem protocols do you support?
K56Flex, x2 and V.90. For serious speed freaks, there's ISDN access at 128kbps



How many email addresses do I get?
One, and by the time you read this, the Web-based service should have been replaced by a POP3 one

And what about newsgroups?
There's access to about 20,000, including three specific to Internet Lite

I'd like to create my own Web site. Do I get anywhere to put it?
No, there's no free space

If I get stuck, who do I call?
Call tech support on 0870 908 8891. It's open 24-hours, seven days a week– calls are charged at the national call rate

Can I get help by email or by looking at your Web site?
There's no conventional email support, but if you email tech support, you receive an email with a reference number saying that they will phone you back

I've got a Mac – can I get specialised technical support?
No

If I don't use my account for a while, how long will it be before you disconnect me?
Never

OK, I'm interested. How do I go about getting an account?
Ring 0800 092 3001 for the CD (but you'll need your credit card to pay the £10) or order it from the Web page.

Is it possible for me to sign up at the Web site?
No

Do you require caller line identification?
No

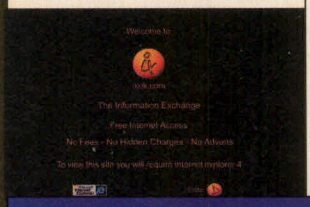
Service provider:	Internet Lite
Web site:	http://www.cwcom.net
General enquiries:	0800 092 9001

IXUK

THIS SERVICE PROVIDER IS SUITABLE FOR BOTH HOME AND BUSINESS USE. IT HAS SOME EXCELLENT QUALITIES, ESPECIALLY THE ONLINE SUPPORT PAGES

Is there an initial set-up fee?
No, it's free

What modem protocols do you support?
9600kps right up to 56K (V.90). 64k and 128K ISDN lines are also supported



How many email addresses do I get?
You get unlimited addresses on a single POP3 email account. IXUK supply a version of Microsoft Mail

And what about newsgroups?
There's access to newsgroups

I'd like to create my own Web site. Do I get anywhere to put it?
There's 20Mb for you to play around with

If I get stuck, who do I call?
You can contact the tech support desk on 0906 690 3315. It is open 24-hours a day. Calls are charged at 50p a minute. There is a separate number for connecting with an ISDN line – 0845 301 1515

Can I get help by email or by looking at your Web site?
Yes there is thorough online support available, that should answer any of your questions

I've got a Mac – can I get specialised technical support?
Unfortunately, there's no specialised Mac support

If I don't use my account for a while, how long will it be before you disconnect me?
You won't be disconnected

OK, I'm interested. How do I go about getting an account?
You don't have to worry about getting a CD, the only way to set up an account is online

Is it possible for me to sign up at the Web site?
Yes, just go to the Web site at http://www.ixuk.com

Do you require caller line identification?
No

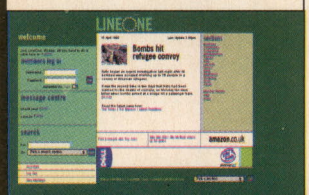
Service provider:	IXUK
Web site:	http://www.ixuk.com
General enquiries:	No number

LineOne

YOU USED TO HAVE TO PAY FOR LINEONE, BUT NOW IT HAS JOINED THE RANKS OF VIRGIN NET AND MADE ITS SERVICE FREE. IT IS BASICALLY THE SAME, BUT COSTS YOU NOTHING

Is there an initial set-up fee?
No, you pay absolutley nothing to get connected to the LineOne service

What modem protocols do you support?
K56Flex and V.90 are supported,as well as x2. ISDN are also supported



How many email addresses do I get?
You are allowed anything up to five email addresses

And what about newsgroups?
LineOne users have full access to newsgroups

I'd like to create my own Web site. Do I get anywhere to put it?
You get 10Mb of Web space

If I get stuck, who do I call?
The tech support line (0906 302 0100) is open around the clock. It will cost you 50p per minute

Can I get help by email or by looking at your Web site?
Yes, you can benefit from email support. Send your queries to support@lineone.net

I've got a Mac – can I get specialised technical support?
Yes, you can get Macintosh support

If I don't use my account for a while, how long will it be before you disconnect me?
You shouldn't be disconnected

OK, I'm interested. How do I go about getting an account?
There are two ways that you can join up to LineOne. The first is to get the connectivity software. You can do this by calling 0800 111 210

Is it possible for me to sign up at the Web site?
This is the second way for you to get connected. Go along to http://www.lineone.net/freetrial for details of how to sign up online

Do you require caller line identification?
No

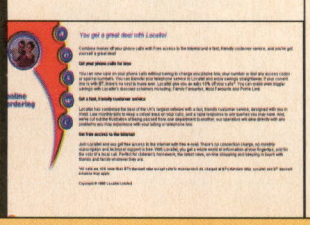
Service provider:	LineOne
Web site:	http://www.lineone.net
General enquiries:	0800 111210

Localtel

LOCALTEL IS A TELEPHONE COMPANY THAT IS SETTING UP A FREE ISP SERVICE. WHEN WE SPOKE TO LOCALTEL, IT WAS PLANNING TO LAUNCH THE SERVICE ON 1 MARCH

Is there an initial set-up fee?
No

What modem protocols do you support?
K56Flex and V.90



How many email addresses do I get?
Unlimited POP3 addresses

And what about newsgroups?
There should be newsgroups, but the exact number still has to be finalised

I'd like to create my own Web site. Do I get anywhere to put it?
There will be 20Mb of Web space, but it won't be available for business use

If I get stuck, who do I call?
The telephone support number is to be confirmed, but it should be open 8am to 9pm Monday to Friday, and 10am to 6pm over the weekend.

Can I get help by email or by looking at your Web site?
Significant help is planned

I've got a Mac – can I get specialised technical support?
There will only really be help to get connected

If I don't use my account for a while, how long will it be before you disconnect me?
You won't get disconnected

OK, I'm interested. How do I go about getting an account?
Ring 0800 376 5261 to get the CD

Is it possible for me to sign up at the Web site?
No, the only way that you can connect is by getting hold of the CD

Do you require caller line identification?
No

Service provider:	Localtel
Web site:	http://www.localtel.co.uk
General enquiries:	0800 376 5261

DOES YOUR ISP OFFER YOU

FREE 0800 CALLS?

X-STREAM DOES!

The X-Stream Network was the first ISP to offer FREE Internet access and also the first ISP to offer FREE 0800 calls.

Users of X-StreaMail (our FREE POP3 e-mail service) are regularly notified of the times when X-Stream offers a 100% FREE service and FREE 0800 calls.

To find out how you can make X-Stream savings on your telephone bills, please visit our website or call the FREE 0800 number below!

the X-stream network

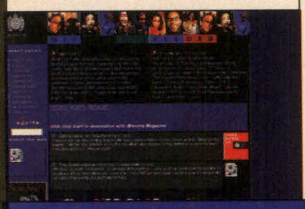
100% FREE Internet access

www.x-stream.com 0800 358 5678

Free for all!

Ministry of Sound

THE FAMOUS LONDON NIGHTCLUB HAS DECIDED TO MAKE ITS INTERNET SERVICE FREE. SUBSCRIBERS WILL HAVE ACCESS TO EXCLUSIVE VIP CONTENT



Is there an initial set-up fee?
No, you don't have to pay anything

What modem protocols do you support?
K56Flex and V.90 are supported

How many email addresses do I get?
You can enjoy unlimited email addresses, each with the domain name of ministryofsound.net

And what about newsgroups?
There are no specific newsgroups

I'd like to create my own Web site. Do I get anywhere to put it?
Customers will receive 20Mb of Web space for personal use

If I get stuck, who do I call?
There's technical support available. The number is 0906 676 7678. It will cost you 50p a minute, and the support desk is open 8am until midnight Monday to Friday, and 10am until 6pm Saturday and Sunday

Can I get help by email or by looking at your Web site?
Yes, there is email support available

I've got a Mac – can I get specialised technical support?
Yes, there is Mac support available on the Web pages

If I don't use my account for a while, how long will it be before you disconnect me?
You won't be disconnected

OK, I'm interested. How do I go about getting an account?
If you want to sign up with the Ministry service, you will need to buy yourself a copy of the *Ministry* magazine. This comes with a CD-ROM for installing the service

Is it possible for me to sign up at the Web site?
No, the only way is by using the CD

Do you require caller line identification?
No

Service provider:	Ministry of Sound
Web site:	http://www.ministryofsound.co.uk
General enquiries:	No number

NetDirect

ADDING TO ITS EXISTING PORTFOLIO, YOU CAN NOW USE THE COMPANY TO ACCESS THE INTERNET FOR FREE, WITH NETDIRECT ON-LINE (NDO)

Is there an initial set-up fee?
No, you don't have to pay anything

What modem protocols do you support?
K56Flex , x2, V.90 and up to 128Kbp

How many email addresses do I get?
You get unlimited amount of email addresses, and you also get a sub-domain

And what about newsgroups?
Access to all the Web's newsgroups

I'd like to create my own Web site. Do I get anywhere to put it?
Customers will receive 20Mb of Web space

If I get stuck, who do I call?
There's technical support available. The number is 0906 558 8550

Can I get help by email or by looking at your Web site?
Yes, there is email support and help on the Web site. Go to http://www.support.netdirect-online.co.uk

I've got a Mac – can I get specialised technical support?
Yes, there is Mac support available on the Web pages

If I don't use my account for a while, how long will it be before you disconnect me?
You'll be disconnected after 90 days

OK, I'm interested. How do I go about getting an account?
You can sign up online

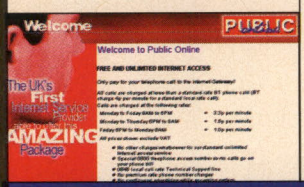
Is it possible for me to sign up at the Web site?
Yes, go to http://www.signup.netdirect-online.co.uk

Do you require caller line identification?
Yes

Service provider:	NetDirect
Web site:	http://www.netdirect-online.co.uk
General enquiries:	0800 731 3311

Public Online

PUBLIC ONLINE OFFERS NET ACCESS USING 0800 NUMBERS. IT EMAILS THE USER A MONTHLY ITEMISED PHONE BILL AND DEBITS THE CHARGE FROM THE USER'S CREDIT CARD



Is there an initial set-up fee?
No, but you'll need your credit card details

What modem protocols do you support?
K56Flex and V.90, but not x2. You can also use 64kbps ISDN

How many email addresses do I get?
POP3 "email addresses for all the family"

And what about newsgroups?
"Most of the Usenet newsgroups"

I'd like to create my own Web site. Do I get anywhere to put it?
You get 5Mb. If you want to use it for business, there's a separate free business account

If I get stuck, who do I call?
Telephone tech support on 0845 0800 836 It's open 9am to 6pm Monday to Friday only and calls are charged at local call rates

Can I get help by email or by looking at your Web site?
You should get a reply to your email within a day during tech support hours

I've got a Mac – can I get specialised technical support?
Public Online doesn't support Macs

If I don't use my account for a while, how long will it be before you disconnect me?
Never

OK, I'm interested. How do I go about getting an account?
Order the CD which contains IE 4 by going to the Web page.

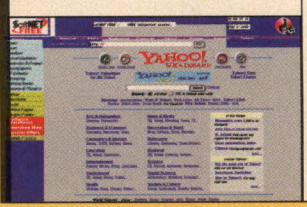
Is it possible for me to sign up at the Web site?
No

Do you require caller line identification?
Yes

Service provider:	Public Online
Web site:	http://www.publiconline.net
General enquiries:	0181 636 7373

SoftNET FREE

SOFTNET FREE HAS BEEN PROVIDING FREE INTERNET ACCESS SINCE DECEMBER 1998 AND HAS MORE THAN 13,000 USERS. IT WAS SET UP BY THE SOFTWARE WAREHOUSE



Is there an initial set-up fee?
No, it's free

What modem protocols do you support?
K56Flex and V.90, but not x2. There's ISDN access at 64k

How many email addresses do I get?
An unlimited number of POP3 addresses

And what about newsgroups?
There's access to over 32,000 newsgroups, and there are two specifically for SoftNET FREE

I'd like to create my own Web site. Do I get anywhere to put it?
There's 10Mb to play with. Business use is allowed

If I get stuck, who do I call?
Call 0890 120 4000. Tech support is open 8am to 8pm Monday to Friday and 9am to 5pm over the weekend. Calls cost 60p per minute

Can I get help by email or by looking at your Web site?
There's email help. SoftNET FREE aims to reply in a couple of hours. The Web page contains FAQs and a glossary

I've got a Mac – can I get specialised technical support?
No, you're out of luck

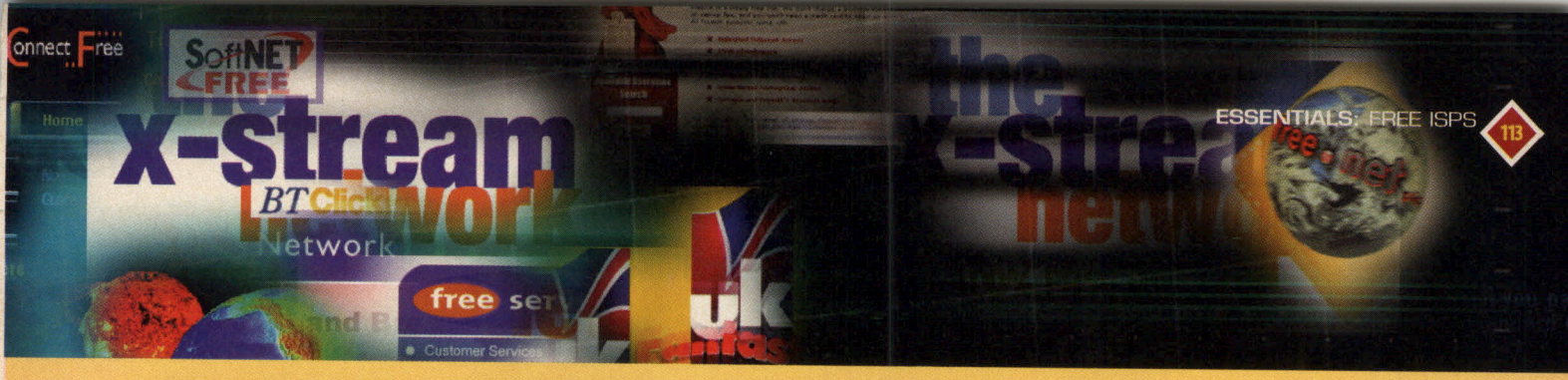
If I don't use my account for a while, how long will it be before you disconnect me?
Inactive accounts are suspended after 30 days, and deleted after 60 days

OK, I'm interested. How do I go about getting an account?
Get hold of the CD via the Web site, or by ringing 0870 727444. The CD contains IE 4.

Is it possible for me to sign up at the Web site?
Yes, an online sign-up will be available

Do you require caller line identification?
Yes

Service provider:	SoftNET FREE
Web site:	http://www.softnetfree.co.uk
General enquiries:	0800 035 5355



Sniff Out

THE SERVICE COMES WITH A VERY CUTE DOG ICON, WHICH SHOULD GO DOWN WELL WITH DOG LOVERS. THE SERVICE COMES WITH ALL THE USUAL FACILITIES

Is there an initial set-up fee?
No, the service is free

What modem protocols do you support?
All current modem protocols from 9600bps to 56Kbps. V.90, 64K and 128K ISDN are also supported through the same dial-up number

How many email addresses do I get?
You can have unlimited email addresses with an option to have different passwords for each

And what about newsgroups?
There's currently access to over 40,000 newsgroups

I'd like to create my own Web site. Do I get anywhere to put it?
You get 20Mb of Web space

If I get stuck, who do I call?
The tech support line (0906 690 3315) is open 24-hours, seven days a week. Calls are charged at 50p a minute

Can I get help by email or by looking at your Web site?
There is full email support at support@sniffout.co.uk. The site also has illustrated help pages

I've got a Mac – can I get specialised technical support?
The Web pages are being expanded to include Mac help

If I don't use my account for a while, how long will it be before you disconnect me?
You will never be disconnected

OK, I'm interested. How do I go about getting an account?
Contact support@sniffout.co.uk To get an installation CD

Is it possible for me to sign up at the Web site?
Yes, you can also sign up at the site if you don't want to apply for the CD

Do you require caller line identification?
Yes

Service provider:	Sniff Out
Web site:	http://www.sniffout.net
General enquiries:	0171 256 6631

Telinco

THIS TELCO SET UP A FREE ISP SERVICE ON 30 NOVEMBER 1998 AND NOW HAS ABOUT 40,000 USERS. TELINCO OFFERS SUPPORT FOR WINDOWS, MACS AND LINUX

Is there an initial set-up fee?
No

What modem protocols do you support?
K56Flex, x2 and V.90. There's also 128kbps ISDN access

How many email addresses do I get?
There's an unlimited number of POP3 aliases to be had

And what about newsgroups?
Telinco provides access to the most frequently used groups, but there are no newsgroups specifically for Telinco users

I'd like to create my own Web site. Do I get anywhere to put it?
You get 5Mb of Web space. If you want to use it for business, that's OK

If I get stuck, who do I call?
The telephone support number is 0906 960 0960. It's open 8am to 9pm, seven days per week, and will set you back £1 per minute

Can I get help by email or by looking at your Web site?
Yes, there is email support and help on the Web page

I've got a Mac – can I get specialised technical support?
Yes, you can get support

If I don't use my account for a while, how long will it be before you disconnect me?
After 90 days

OK, I'm interested. How do I go about getting an account?
Get the CD by ringing 0800 542 0800

Is it possible for me to sign up at the Web site?
Yes, you can

Do you require caller line identification?
No

Service provider:	Telinco
Web site:	http://www.telinco.co.uk
General enquiries:	0800 542 0800

TescoNet

TESCO HAS HAD A SITE ON THE WEB SINCE APRIL 1995 AND NOW PROVIDES FREE NET ACCESS IN THE FORM OF TESCONET. THE ONLY REQUIREMENT IS THAT YOU MUST HAVE A TESCO CLUBCARD

Is there an initial set-up fee?
No

What modem protocols do you support?
K56Flex, but not x2. TescoNet was aiming to have V.90 ready by the end of February. There's also ISDN at 64kbps

How many email addresses do I get?
Five POP3 accounts

And what about newsgroups?
There's access to 30,000 newsgroups, but no newsgroups especially for TescoNet users

I'd like to create my own Web site. Do I get anywhere to put it?
There's 10Mb of free Web space, which can be used for business

If I get stuck, who do I call?
Call 0906 8020 111. It's open from 8am to midnight, seven days a week. Calls cost 50p per minute

Can I get help by email?
Yes, there's email help. TescoNet aims to respond within 48 hours. The Web site contains info about managing your account

I've got a Mac – can I get specialised technical support?
Yes, TescoNet supports Macs

If I don't use my account for a while, how long will it be before you disconnect me?
You'd be cut off after 30 days, and have to phone up to get the account reactivated

OK, I'm interested. How do I go about getting an account?
Get a CD from Tesco or ring 0345 225533. The CD has IE 4 and Outlook Express and software to set up the account

Is it possible for me to sign up at the Web site?
Yes, all the details you need are online, but you must have a Tesco Clubcard

Do you require caller line identification?
Yes

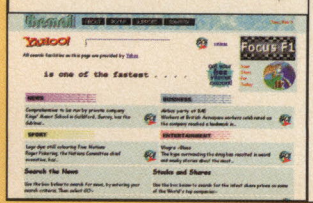
Service provider:	TescoNet
Web site:	http://www.tesco.net
General enquiries:	0345 225533

themail

THEMAIL IS PART OF CABLENET, AN ISP THAT'S BEEN AROUND FOR ABOUT FOUR YEARS. ITS SITE CONTAINS CONTENT IN THE FORM OF NEWS, SPORT AND WEATHER

Is there an initial set-up fee?
No, there isn't

What modem protocols do you support?
K56Flex, x2 and V.90. And there's ISDN access at 64kbps



How many email addresses do I get?
One POP3 account. You may receive advertisements in your email

And what about newsgroups?
It doesn't have own news server. It provides pointers to the free news servers on the Web

I'd like to create my own Web site. Do I get anywhere to put it?
There's 30Mb of space available.

If I get stuck, who do I call?
There was no telephone support at the time of writing, but it was planned for March

Can I get help by email or by looking at your Web site?
Yes, email help should reply the same day. The Web page contains a bulletin board, where all queries and answers are stored. There are also guides to setting up Eudora, Pegasus and Outlook Express

I've got a Mac – can I get specialised technical support?
The site contains info on how to get connected

If I don't use my account for a while, how long will it be before you disconnect me?
60 days

OK, I'm interested. How do I go about getting an account?
A CD should be available in March, or you can sign up on the Web page

Is it possible for me to sign up at the Web site?
Yes, look at the Web page

Do you require caller line identification?
No

Service provider:	themail
Web site:	http://www.themail.co.uk
General enquiries:	01424 830 907

Free for all!

Tiny

THE POPULAR COMPUTER MANUFACTURER HAS ALSO ANNOUNCED IT IS TO BECOME A SERVICE PROVIDER

Is there an initial set-up fee?
There's no charge

What modem protocols do you support?
Up to V.90, ISDN at 64K, and up to Flex V.34 33.3K

How many email addresses do I get?
There are five separate email addresses

And what about newsgroups?
There are over 25,000 newsgroups available

I'd like to create my own Web site. Do I get anywhere to put it?
There's 15Mb of Web space supplied for you to do what you will with it

If I get stuck, who do I call?
Pre-installed customers can phone the standard rate number on 02193 821222 between 9am and 5.30pm Monday to Saturday. Other customers can call the premium rate line whic is open 24-hours a day, seven days a week. the number is 0900 290 9103 and costs 50p a minute

Can I get help by email or by looking at your Web site?
Yes, there are FAQs on the Web site

I've got a Mac – can I get specialised technical support?
A Mac CD will be available soon

If I don't use my account for a while, how long will it be before you disconnect me?
After 30 days

OK, I'm interested. How do I go about getting an account?
Either from a disc, or from a pre-installed drive in new Tiny PCs. You can also request a disc online

Is it possible for me to sign up at the Web site?
It will be available soon

Do you require caller line identification?
Yes

Service provider:	Tiny Online
Web site:	http://www.tinyonline.net
General enquiries:	0800 821333

UK Fantastic

UK FANTASTIC WAS LAUNCHED ON 1 JANUARY 1999 AND HAS AROUND 10,000 USERS. APPARENTLY, THE 'UKF.CO.UK' DOMAIN IS PROVING ATTRACTIVE TO BUSINESSES WHO WANT TO AVOID HAVING 'FREE' IN THEIR URL

Is there an initial set-up fee?
There's no charge

What modem protocols do you support?
K56Flex, x2 and V.90 are supported. You can also use

128kbps ISDN

How many email addresses do I get?
Unlimited POP3 addresses

And what about newsgroups?
About 18,000

I'd like to create my own Web site. Do I get anywhere to put it?
There is 5Mb on offer, and there are plans to offer unlimited space. You can use it for business use if you so wish

If I get stuck, who do I call?
Tech support can be reached at 0906 960 2472, open 24-hours, seven days a week. The calls cost £1 per minute

Can I get help by email or by looking at your Web site?
You should get an email reply in a couple of hours. The Web page contains set up details for Windows 95/98 and Macs

I've got a Mac – can I get specialised technical support?
There's telephone support to get you online

If I don't use my account for a while, how long will it be before you disconnect me?
Sixty days, but this policy is not yet being enforced

OK, I'm interested. How do I go about getting an account?
There's no CD, so just go to the Web site

Is it possible for me to sign up at the Web site?
Yes you can, but you'd need to ring up for the settings

Do you require caller line identification?
Yes

Service provider:	UK Fantastic
Web site:	http://www.ukfantastic.net
General enquiries:	0702 1104458

UK Online

YOU USED TO HAVE TO PAY FOR UK ONLINE, BUT NOW YOU CAN GET IT ALL FOR FREE. IT WAS ONE OF THE FIRST ISPS TO OFFER SUPPORT FOR MACS

Is there an initial set-up fee?
No, it's free

What modem protocols do you support?
K56Flex and V.90 are supported, as well as single and

dual ISDN

How many email addresses do I get?
Customers will receive unlimited email addresses

And what about newsgroups?
Uk Online only carry newsgroups that are not illegal or that carry pornograhic content

I'd like to create my own Web site. Do I get anywhere to put it?
You will get unlimited Web space with your account

If I get stuck, who do I call?
You have two options with technical support. You can either opt to pay £4.70 incl. VAT a month for unlimited tech support on a Lo-Call number. Or you can pay 25p a minute for support as and when you need it. Lo-Call users should call 0845 333 4445 and others should call 0906 296 5555

Can I get help by email or by looking at your Web site?
Email help is available on support@ukonline.co.uk

I've got a Mac – can I get specialised technical support?
Yes, Mac users are very well looked after

If I don't use my account for a while, how long will it be before you disconnect me?
Accounts always remain on the database

OK, I'm interested. How do I go about getting an account?
You can contact Uk Online from the Web site

Is it possible for me to sign up at the Web site?
Yes

Do you require caller line identification?
No

Service provider:	UK Online
Web site:	http://www.ukonline.co.uk
General enquiries:	No specific number

Virgin Net

VIRGIN HAS MADE ITS INTERNET SERVICE FREE FOR EVERYONE TO ENJOY. IF YOU LIKE THE VIRGIN BRAND, SIGN UP NOW

Is there an initial set-up fee?
No

What modem protocols do you support?
56Kbps, x2 and V.90

How many email addresses do I get?
You get five email addresses

And what about newsgroups?
No newsgroups, only chat areas and noticeboards

I'd like to create my own Web site. Do I get anywhere to put it?
You get 10Mb of Web space

If I get stuck, who do I call?.
The help desk number is 0845 650 0000 and is open 24-hours a day. Calls are charged at £1 per minute, or you can pay £5.99 a month for a local call rate subscription

Can I get help by email or by looking at your Web site?
Yes, the site has solutions for common problems, and you can email for help by contacting support@virgin.net

I've got a Mac – can I get specialised technical support?
Yes, you can phone 0500 558800

If I don't use my account for a while, how long will it be before you disconnect me?
You don't get disconnected

OK, I'm interested. How do I go about getting an account?
Go to the Virgin Net Web site (http://www.virgin.net) and register online to be sent your software pack. Alternatively,

Is it possible for me to sign up at the Web site?
Yes you can

Do you require caller line identification?
Yes

Service provider:	Virgin Net
Web site:	http://www.virgin.net
General enquiries:	0845 650 0000

WH Smith

THE HIGH STREET RETAILERS NOW OFFERS YOU ACCESS TO THE INTERNET AND MORE INFORMATION ABOUT ITS NATIONWIDE STORES

Is there an initial set-up fee?
No

What modem protocols do you support?
K56Flex but not V.90 or x2. there's also ISDN access at 64kbps

How many email addresses do I get?
Unlimited, and both Web-based and POP3 mailboxes are available

And what about newsgroups?
There's no news server

I'd like to create my own Web site. Do I get anywhere to put it?
There's no Web space, either

If I get stuck, who do I call?
The help desk number is 0906 302 0240 and is open from 8am to midnight, seven days a week. Calls are charged at 50p a minute

Can I get help by email or by looking at your Web site?
Yes

I've got a Mac – can I get specialised technical support?
Once the Mac software is available

If I don't use my account for a while, how long will it be before you disconnect me?
You don't get disconnected

OK, I'm interested. How do I go about getting an account?
You can buy a disk from any WHSmith for 50p. All the proceeds go to fund the company's community work in the field of literacy

Is it possible for me to sign up at the Web site?
Yes, you can also sign up online

Do you require caller line identification?
Yes

Service provider:	WHSmith
Web site:	http://www.whsmith.co.uk
General enquiries:	0171 409 3222

Xoom

THIS COMPANY OFFERS LOADS OF FEATURES, INCLUDING A SHOPPING GUIDE WHERE YOU CAN PICK UP GIFTS, FILMS AND SOFTWARE

Is there an initial set-up fee?
No

What modem protocols do you support?
K56Flex. Others are currently being added

How many email addresses do I get?
Unlimited. Currently it's Web-based email, but POP3 should be available in the near future

And what about newsgroups?
There's Web-based news service available, but there's no separate news server at this time

I'd like to create my own Web site. Do I get anywhere to put it?
There's unlimited free Web space, for personal and commercial use. There's also free software and downloads

If I get stuck, who do I call?
Phone on the normal number, which is not premium rate

Can I get help by email or by looking at your Web site?
Yes

I've got a Mac – can I get specialised technical support?
Not at the moment

If I don't use my account for a while, how long will it be before you disconnect me?
You don't get disconnected

OK, I'm interested. How do I go about getting an account?
Visit the Web site at http://www.xoom.net and follow the instructions

Is it possible for me to sign up at the Web site?
Yes, see above

Do you require caller line identification?
Yes

Service provider:	Xoom
Web site:	http://www.xoom.co.uk
General enquiries:	0171 409 3222

X-Stream

THE X-STREAM NETWORK APPEARED IN MARCH 1998 AND HAS 180,000 NON-PAYING CUSTOMERS. INSTALLING ITS CONNECTION SOFTWARE RESULTS IN A BANNER BAR ALONG THE TOP OF YOUR SCREEN WHICH DISPLAYS ADS WHILE YOU'RE BROWSING

Is there an initial set-up fee?
There's no charge

What modem protocols do you support?
K56Flex and V.90, but not x2 or ISDN

How many email addresses do I get?
You get one POP3 email account

And what about newsgroups?
There's no news server, and no newsgroups dealing specifically with the X-Stream Network

I'd like to create my own Web site. Do I get anywhere to put it?
There's 20Mb of Web space on offer with the X-Stream Network. It can be used for business if you want

If I get stuck, who do I call?
The number's 0900 901 1000, open 24-hours, seven days a week. Calls will cost you 50p per minute

Can I get help by email or by looking at your Web site?
Yes, you should get a reply within 24 hours. The Web page contains FAQs and info on configuring software

I've got a Mac – can I get specialised technical support?
No

If I don't use my account for a while, how long will it be before you disconnect me?
Never

OK, I'm interested. How do I go about getting an account?
The X-Stream Network provides a CD. Get it by ringing 0870 730 6466. You can also sign up online

Is it possible for me to sign up at the Web site?
Yes, you can download the X-Stream software from the Web site

Do you require caller line identification?
No

Service provider:	The X-Stream Network
Web site:	http://www.x-stream.com
General enquiries:	0870 730 6466

Yahoo! Online

THE POPULAR SEARCH DIRECTORY HAS JUST ENTERED THE FREE ISP MARKET WITH YAHOO! ONLINE

Is there an initial set-up fee?
No, there's no fee

What modem protocols do you support?
K56Flex and V.90 are supported

How many email addresses do I get?
You have unlimited addresses and use the Yahoo! Mail service

And what about newsgroups?
Yes, there's full access to the thousands of newsgroups available

I'd like to create my own Web site. Do I get anywhere to put it?
There's no Web space included, but you do get instructions on how to submit your site to Yahoo!

If I get stuck, who do I call?
You can phone up the technical support line between 8am and midnight seven days a week. The calls will cost 50p a minute, and the number is 0906 302 1200

Can I get help by email or by looking at your Web site?
Yes, there are a series a frequently asked questions on the Web site

I've got a Mac – can I get specialised technical support?
However, there's no specific support for Mac users

If I don't use my account for a while, how long will it be before you disconnect me?
You won't be disconnected

OK, I'm interested. How do I go about getting an account?
The only way for you to sign up is online at the Yahoo! Online site

Is it possible for me to sign up at the Web site?
Yes, simply go to http://www.yahoo.co.uk/yahooclick/infopages for more information

Do you require caller line identification?
Yes

Service provider:	Yahoo! Online
Web site:	http://www.yahoo.co.uk
General enquiries:	No number

Essential Web addr

Wave goodbye to frustrating searches on the Net by adding these ess

SEARCH ENGINES

AltaVista
http://altavista.digital.com

DejaNews
http://www.dejanews.com

Direct Hit
http://www.directhit.com

Euroseek
http://www.euroseek.net/page?ifl=uk

Excite
http://www.excite.com

Go To
http://www.go2.com

HotBot
http://www.hotbot.com

Infoseek
http://www.infoseek.com

Lycos
http://www.lycos.com

Magellan
http://www.mckinley.com

Maxisearch
http://www.maxisearch.com

MusicSearch
http://musicsearch.com

Search UK
http://www.searchUK.co.uk

Webcrawler
http://webcrawler.com

SEARCH DIRECTORIES

The Argus ClearingHouse
http://www.clearinghouse.net

Brit Index
http://www.yacc.co.uk/britind

Disinformation
http://www.disinfo.com

EuroSeek
http://www.euroseek.net

Four11
http://www.four11.com

Internet Directory UK
http://www.whatsnew.com/id

Internet Tools
http://www.itools.com

Lifestyle UK
http://www.lifestyle.co.uk

My Taxi
http://www.mytaxi.co.uk

UKdirectory
http://www.ukdirectory.com

UKOnline
http://www.ukonline.com

UK Plus
http://www.ukplus.co.uk

What's Online
http://www.whatsonline.co.uk

Wired Source
http://www.wiredsource.com

WWWWomen
http://www.women.com

Yahoo!
http://www.yahoo.com

Yahoo! UK & Ireland
http://www.yahoo.co.uk

META SEARCHERS

All-In-One
http://www.albany.net/allinone

Ask Jeeves
http://askjeeves.com

Inference Find
http://www.inference.com/infind

Metacrawler
http://metacrawler.com

Savvysearch
http://guaraldi.cs.colostate.edu:2000

EMAIL SEARCH

Bigfoot
http://www.bigfoot.com

The Email Address Book
http://www.emailbook.com

Email Finder
http://www.emailfinder.com

Internet Address Finder
http://www.iaf.net

Lycos People Finder
http://www.lycos.com/pplfndr.html

WhoWhere?
http://www.whowhere.com

World Email Directory
http://www.worldemail.com/index.shtml

Yahoo People Search
http://yahoo.four11.com/cgi-bin/Four11Main?yahooe&template=yahoo.t

PHONE DIRECTORIES

Electronic Yellow Pages
http://www.eyp.co.uk

Scoot Freepages
http://www.freepages.co.uk

World Wide Yellow Pages
http://www.yellowpages.com

WEB SITE CATALOGUES

100 Hot Stars
http://www.100hot.com/star

100 Hot Web Sites
http://www.hot100.com

Cool Site of the Day
http://cool.infi.net

Cruel Site of the Day
http://www.cruel.com

Netsurf Central
http://www.netsurfcentral.com

Top 50 UK Web Sites
http://www.top50.co.uk/list.htm

Web100
http://www.web100.com

World 1000
http://www.hitbox.com/wc/world.html

Yell
http://www.yell.co.uk

MAILING LISTS

InReference
http://www.reference.com

Liszt
http://www.liszt.com

Publicly Accessible Mailing Lists
http://www.neosoft.com/internet/paml

Search the Net!
http://www.statsvet.uu.se/maillist.html

SOFTWARE DOWNLOADS

Cool Tool
http://www.cooltool.com

Dave Central
http://www.davecentral.com

Download.com
http://www.download.com

Jumbo Shareware
http://www.jumbo.com

Shareware.com
http://www.shareware.com

Slaughterhouse
http://www.slaughterhouse.com

TUCOWS
http://www.tucows.com

The Ultimate Macintosh
http://users.aol.com/myee/umac.html

Windows 95
http://www.windows95.com

SOFTWARE FIRMS

Adobe
http://www.adobe.com

esses

ential sites to your bookmarks

INFO

Although the Net is an endless source of information, this can also make it difficult to know where to start. That's why we produced this section. So if you're after the latest shareware releases, or need to upgrade your modem, these addresses will help.

Eudora
http://www.eudora.com

IBM
http://www.ibm.com

Microsoft
http://www.microsoft.com

Netscape
http://home.netscape.com

Sun Microsystems
http://www.sun.com

Macromedia
http://www.macromedia.com

RealNetworks
http://www.real.com

The World Wide Web Consortium
http://www.w3.org

HTML TOOLS

BBEdit
http://www.barebones.com

HotDog Express/Pro
http://www.sausage.com

HoTMetaL Pro 4.0
http://www.sq.com

Key Internet Publisher
http://www.learningco.com

Microsoft FrontPage
http://www.microsoft.com/frontpage

PageMill
http://www.adobe.com/prodindex/pagemill/main.html

Zycom
http://www.zy.com

NET FILTERING SOFTWARE

CyberPatrol
http://www.microsys.com

CyberSitter
http://www.pow-dist.co.uk

Image Censor
http://www.microtrope.com/icensor.html

Netnanny
http://www.netnanny.com

Net Shepherd
http://www.shepherd.net

SurfWatch
http://www.spyglass.com

PUSH SERVICES

BackWeb
http://www.backweb.com

CastaNet Tuner
http://www.marimba.com

PointCast
http://www.pointcast.com

MODEM MAKERS

Global Village
http://www.globalvillage.com

Hayes
http://www.hayes.com

Lasat
http://www.lasat.com

Motorola
http://www.motorola.com

MultiTech
http://www.multitech.com

Pace
http://www.pacecom.co.uk

Psion
http://www.psion.com

Typhoon
http://www.typhoon.co.uk

3Com USRobotics
http://www.3com.com

SHOPPING

Antique Collectors' Internet Dictionary
http://www.acid.co.uk/acid

Art Mail Direct
http://members.aol.com/ukgallery

artstream
http://www.artstream.com

AudioStreet.com
http://www.audiostreet.infront.co.uk

The Auction Guide
http://www.auctionguide.com

BarclaySquare
http://www.barclaysquare.co.uk

BBC Shop
http://www.bbcshop.com/shop.html

Black Star
http://www.blackstar.co.uk

Bonhams Auction House
http://www.bonhams.com/index.html

CDnow
http://www.cdnow.com

Christie's
http://www.christies.com

Clarecraft
http://www.clarecraft.com

Currio Shop
http://www.currioshop.com

Diesel
http://www.diesel.co.uk

The Disney Store
http://store.disney.go.com

Drinks Direct
http://www.drinks-direct.co.uk

DVD Express
http://www.dvdexpress.com

Eswap
http://www.eswap.co.uk

Fallen Fruits On-Line
http://www.ecogifts.demon.co.uk

Flowers Direct
http://www.flowersdirectuk.co.uk

Fraser's
http://www.stangib.com

GB Posters
http://www.gbposters.co.uk

The Gift Delivery Company
http://www.city2000.com/giftdelivery

Giftstore UK
http://www.giftstore.co.uk

Granada Home Technology
http://www.granadahome.co.uk

Hobbycraft
http://www.hobbycraft.co.uk

Innovations
http://innovations.co.uk

iMVS
http://www.imvs.com

Interflora
http://www.interflora.co.uk

Music Boulevard
http://www.musicblvd.com

Nostaligia Store
http://www.nostalgia.co.uk

The Old Bear Company
http://www.flair.co.uk/oldbear

Online Auctions
http://www.onlineauctions.co.uk

Original Image Company
http://www.oicuk.com

ORP Rugby Shop
http://www.rugbyshopping.com

QXL Auction
http://www.qxl.com

Sotheby's
http://www.sothebys.com

Toys 'R' Us
http://www.toysrus.co.uk

Video and CD Extravaganza
http://www.videoext.force9.co.uk

Wine Cellar
http://www.winecellar.co.uk

Ye Olde Internette Gifte Shoppe
http://www.loud-n-clear.com/giftshop

BANKING

Abbey National
http://www.abbeynational.co.uk

Bank of Scotland
http://www.bankofscotland.co.uk

Barclays
http://www.barclays.com

Lloyds Bank
http://www.lloydsbank.co.uk

SHOPPING MALLS

Best of British
http://www.thebestofbritish.com

British Shopping Mall and Business Park
http://www.britshop.com

The English Channel
http://www.e-channel.com

Fortune City
http://www.fortunecity.com

The Market Cross
http://www.marketcross.com

MarketNet
http://mkn.co.uk

netShopping
http://www.netshopping.co.uk

OneStore
http://one.store.co.uk

Queen Street Shopping Centre
http://www.queenstreet.co.uk

Quiggens
http://www.merseyworld.com/quiggens

Sci-Fi UK Superstore
http://www.scifi-uk.com

ShopGuide
http://www.shopguide.co.uk

Shoppers Universe
http://www.shoppersuniverse.com

The Shopping Pavillion
http://www.vossnet.co.uk/shopping

The UK Shopping City
http://www.ukshops.co.uk

Weblinks Ltd
http://www.weblinks.co.uk

BOOKS

Alphabetstreet Books
http://www.alphabetstreet.co.uk

Amazon Books
http://www.amazon.co.uk

Banned Books Online
http://www.cs.cmu.edu/Web/People/spok/banned-books.html

Blackwells
http://www.blackwells.co.uk

Bookfinder General
http://www.nwnet.co.uk/BFG

The Book People
http://www.thebookpeople.co.uk

The Children's Book Centre
http://www.childrensbookcentre.co.uk

The Computer Bookshop
http://www.compbook.co.uk

Dillons
http://www.dillons.co.uk

The Internet Book Shop
http://www.bookshop.co.uk

Penguin Books
http://www.penguin.co.uk

Pointers Book Shop
http://www.pointersbooks.co.uk

Waterstones
http://www.waterstones.co.uk

W Heffers and Sons
http://www.heffers.co.uk

NEWS

CNN
http://www.cnn.com

BBC News
http://www.bbc.co.uk

The Guardian Online
http://www.guardian.co.uk

The Electronic Telegraph
http://www.telegraph.co.uk

HotWired
http://www.hotwired.com

The Independent
http://www.independent.co.uk

PA News Feature
http://www.pa.press.net

ITN
http://www.itn.co.uk

The Nando Times
http://www.nando.net

INTERNET NEWS

News on the Net
http://www.reporter.org/news

Internet News
http://www.internetnews.ca

Internet Daily News
http://www.tvpress.com/idn/idnfp.htm

Internet News and Columns
http://www.lisco.com/technews.htm

TRAVEL

ABTA
http://www.abtanet.com

Air Miles UK
http://www.airmiles.co.uk

All-In-One British Timetables
http://www.ukonline.co.uk/UKOnline/Travel/contents.html

Alternative
http://www.alternativeturkey.com

British Airways
http://www.british-airways.com

Bucketshop.com
http://www.bucketshop.com

Cheap Flights
http://www.cheapflights.co.uk

Discount Holiday Flights
http://www.dhf.co.uk

Doctor Travel
http://www.doctor-travel.com

The Flight Shop
http://www.theflightshop.co.uk

Internet Travel Services
http://www.itsnet.co.uk

Lastminute.com
http://www.lastminute.co.uk

Lonely Planet
http://www.lonelyplanet.com

Rainbow Flights
http://www.rainbow-flights.co.uk

Rough Guide
http://www.roughguides.com

Student Flights
http://www.studentflights.co.uk

Travel UK
http://www.travel-uk.com

CLASSIFIEDS

ClassifiedADs.co.uk
http://www.classifiedads.co.uk

Exchange and Mart
http://www.ExchangeAnd Mart.co.uk

Exchange Trade
http://www.exchangetrade.com

Globalfronts
http://www.globalfronts.com

Localads.net
http://www.localads.net

London Classified
http://www.londonclassified.com

Loot
http://www.lootlink.com

WEATHER FORECASTS

BBC Weather Centre
http://www.bbc.co.uk/weather

The Met Office
http://www.met-office.gov.uk

Online Weather
http://www.onlineweather.com

UK Weather
http://www.nottingham.ac.uk/meteosat

The Very Useful UK Weather Page
http://www.maalla.demon.co.uk/UK-weather

CHARITIES

Age Concern
http://www.ace.org.uk

Amnesty International
http://www.amnesty.org.uk/index.html

Anti-Slavery International
http://www.charitynet.org/~asi

The Big Issue
http://www.bigissue.com

The Born Free Foundation
http://web.ukonline.co.uk/bornfree

Cancer Research Campaign
http://www.crc.org.uk

Charities on the Internet
http://www.charity.ndirect.co.uk

Childline
http://www.childline.org.uk

Express Link Up
http://www.express-link-up.org

Fund for the Replacement of Animals in Medical Experiments
http://www.frame-uk.demon.co.uk

Greenpeace
http://www. greenpeace.org.uk

Humane Research Trust
http://www.btinternet.com/~shawweb/hrt

Leukaemia Research Fund
http://www.leukaemia-research.org.uk

National Anti-Vivisection Society
http://www.navs.org/

National Society for the Prevention of Cruelty to Children
http://www.nspcc.org.uk

The Nuffield Trust
http://www.nuffieldtrust.org.uk

Oxfam
http://www.oxfam.org.uk

The Prince's Trust
http://www.princes-trust.org.uk

The Samaritans
http://www.samaritans.org.uk

Scope
http://www.scope.org.uk

Shelter
http://www.vois.org.uk/shelter

Terrence Higgins Trust
http://www.tht.org.uk

MUSEUMS/ GALLERIES

British Museum
http://www.british-museum.ac.uk/

The Museum of Costume
http://www.museumofcostume.co.uk

Museum of London
http://www.museum-london.org.uk

The National Gallery
http://www.nationalgallery.org.uk/

National Maritime Museum
http://www.nmm.ac.uk

National Museum of Photography, Film and Television
http://www.nmsi.ac.uk/nmpft

National Railway Museum
http://www.nmsi.ac.uk/nrm

Royal Academy of Arts
http://www.royalacademy.org.uk

The Science Museum
http://www.nmsi.ac.uk/welcome.html

The Tate Gallery
http://www.tate.org.uk

Victoria and Albert Museum
http://www.vam.ac.uk

EATING OUT

Bruno's guide
http://www.brunos-guide.com

CuisineNet UK
http://www.cuisinenet.co.uk

Dine Out
http://www.dine-out.co.uk

Fatty Arbuckles American Diners
http://www.fatty-arbuckles.co.uk

PizzaExpress
http://www.pizzaexpress.co.uk

Where to Eat
http://www.where-to-eat.co.uk

FOOD AND DRINK

Absolut Vodka
http://www.absolutvodka.com

ASDA Stores
http://www.asda.co.uk

Baxters
http://www.www.baxters.co.uk

Ben and Jerry's
http://www.benjerry.co.uk

Bibendum Wine Ltd
http://www.bibendum-wine.co.uk

Boddingtons
http://www.boddingtons.com

Bottoms Up
http://www.bottomsup.co.uk/bottomsup

Cadbury's
http://www.cadbury.co.uk

Cakes Direct
http://www.thin-end.co.uk

ChocNet
http://193.118.187.102/helo/choc/info

Elizabeth Botham and Sons (cakes)
http://www.botham.co.uk

Finlandia Vodka
http://www.finlandia-vodka.com

Fortnum and Mason Plc
http://www.fortnumandmason.co.uk

The Fresh Food Company
http://www.freshfood.co.uk

FruitNet UK
http://www.mkn.co.uk/help/fruit/info

GourmetNet
http://mkn.co.uk/help/gourmet/info

Gourmet World
http://www.gourmet-world.co.uk

Guinness
http://www.guinness.ie

Heinz Direct
http://www.heinz-direct.co.uk

Highland Fayre
http://www.highlandfayre.co.uk

Mackays
http://www.mackays.com

Real Ale Guide
http://www.real-ale-guide.co.uk

Sainsbury's
http://www.j-sainsbury.co.uk

Smirnoff
http://www.smirnoff.com

South African Wines
http://www.intewine.co.uk

Tesco
http://www.tesco.co.uk

Tia Maria
http://www.tiamaria.co.uk

Vegetarian Society of the United Kingdom
http://www.veg.org/veg/Orgs/VegSocUK

Victoria Wines
http://www.victoriawine.co.uk

Whittard of Chelsea
http://www.whittard.com

Wine Cellar
http://www.winecellar.co.uk

Wine Net
http://www.mkn.co.uk/help/wine/info

SPORTS

A-Z of Paragliding
http://www.paragliding.net

Arrows Grand Prix
http://www.arrows.com

beebSport
http://www.beebsport.beeb.com

Britball Magazine
http://www.britball.com

British Amateur Gymnastics Association
http://www.baga.co.uk

British Aerobatics Association
http://www.aerobatics.org.uk

British Council for Chinese Martial Arts
http://www.bcma.demon.co.uk

British Mountaineering Council
http://www.thebmc.co.uk

CarlingNet
http://www.fa-carling.com

CricInfo
http://www-uk.cricket.org

Glossary: complete &

PRACTICAL INTERNET takes the techno-babble out of the Net and turns it

Accelerated Graphics Port
An Accelerated Graphics Port (AGP) is a bus specification that enables the quick display of 3D graphics on an ordinary personal computer. The interface uses your computer's RAM for refreshing the monitor image.

ActiveX
Microsoft's programming language that downloads and runs programs on your computer's own hard drive. ActiveX technology is used with Microsoft Internet Explorer to make interactive Web pages that look and behave like computer programs, rather than static pages. With ActiveX, users can ask or answer questions, use push buttons, and interact in many other ways with the Web page.

Analogue
Analogue technology refers to electronic transmission caused by adding signals of varying frequency or amplitude to carrier waves of a given frequency of alternating electromagnetic current. A modem is used to convert the digital information in your computer to analogue signals for your phone line. It is also used to convert analogue phone signals to digital information for your computer.

Anchor
In HyperText Markup Language (HTML), an anchor is the establishing of a term, phrase, image, or other information object.

Applet
A small Java program that can be embedded in an HTML page.

Attachment
A file which is included along with an email message.

Backbone
A backbone is a larger transmission line that carries data which is gathered from smaller lines that interconnect with it.

Bandwidth
This refers to the amount of data that can be sent through a given communications circuit in a given amount of time. In general, greater bandwidth means a faster transfer of data from one point to another on the Internet.

BBS
This stands for Bulletin Board System, which is a computerised meeting and announcement system. It allows people to carry on discussions, upload and download files, and make announcements without the people being connected to the computer at the same time.

Bookmarks
The name given to Web sites which are 'marked' for future reference in Netscape Navigator. Also known as 'Favorites' in Internet Explorer.

Boolean
The term 'boolean,' often encountered when doing searches on the Web, refers to a system of logical thought developed by the English mathematician and computer pioneer, George Boole (1815-64). In boolean searching, an 'and' operator between two words or other values (for example, 'pear AND apple') means one is searching for documents containing both of the words or values, not just one of them. An 'or' operator between two words or other values (for example, 'pear OR apple') means one is searching for documents containing either of the words.

Cookie
Data that a Web server gives to a browser the first time the user visits the site. This is then updated with each return visit. The server saves the information the cookie contains about the user. The user's browser does the same – as a text file stored in the Netscape or Explorer system folder. Cookies store information such as username and password and what parts of the site were visited. This information can be updated with each visit.

CU-SeeMe
CU-SeeMe is a cheap product for Internet videoconferencing. Each user installs the CU-SeeMe software, allowing them to have person-to-person or group discussions. Users with a small attached video camera (optional) can transmit their picture to other users in a conference.

DirectX
DirectX is an application program interface (API) for creating and managing graphic images and multimedia effects in applications such as games. The capability to 'play' DirectX applications is included as an integrated part of Microsoft's Internet Explorer 4.0 Web browser.

DNS
Domain Name Server or Domain Name System. This converts an address such as **http://www.paragon.co.uk** into an IP (Internet Protocol) number, such as 194.72.242.3.

Dynamic HTML
Dynamic HTML is a collective term for a combination of new HyperText Markup Language (HTML) tags and options, style sheets, and programming that will let you create Web pages that are more animated and responsive to user interaction than previous versions of HTML. Much of dynamic HTML is specified in HTML 4.0. Dynamic HTML can allow Web documents to look and act like desktop applications or multimedia productions.

Flame
Abusive messages which are sent by email or posted to a newsgroup in response to daft comments or elementary questions.

FTP
File Transfer Protocol. The method which is usually used for transferring files across the Internet. There are separate FTP programs available, although much of it is now done over the Web.

GIF
Graphics Interchange Format. A format for saving images so they can be 'seen' by a Web browser. GIF was developed in 1987 by giant US service provider CompuServe.

Gopher
Gopher is an Internet application protocol in which file structures that are organised according to hierarchy, are maintained on servers that are also part of an overall information structure. Gopher provided a way to bring text files from all over the world to a viewer on your computer.

HTML
HyperText Markup Language. The universal language of the Web in which all pages are written. Official versions of HTML are defined by the W3 Consortium, which is at **http://www.w3.org**.

HTTP
HyperText Transfer Protocol. This is the protocol that is used to carry traffic between a Web browser's computer and the Web site.

Imagemap
In Web page development, an imagemap is a graphic image that is defined so a user can click on different areas of the image and be linked to different destinations. You make an imagemap by defining each of the sensitive areas in terms of their X and Y coordinates. With each set of coordinates, you specify a URL or Web address that will be linked to when the user clicks on that area. Imagemaps are used widely on many Web sites as a more adventuresome form of main menu.

Intelligent Agent
A software routine that uses 'intelligence' to do an assigned task. For example, searching through the Web for pages that match your personal tastes.

Intranet
A (usually) private network which is only accessible by authorised users. For example, a company could connect its Bristol, London and Birmingham offices with its own private intranet.

IRC
Internet Relay Chat. A multi-user chat system. This is a feature of the Net which allows you to hold 'live' text conversations with other people on the same 'channel.'

ISDN
Integrated Services Digital Network. This is a digital alternative to current analogue phone lines. ISDN modems are already available, enabling its users to achieve much faster connection speeds.

ISP
Internet service provider. A company which sells connections to the Net. Compare with online service providers (OSPs) which provide an Internet connection in addition to their own exclusive members-only services such as chat forums, news services, and other assorted information.

Java
A programming language developed by Sun Microsystems that enables a programmer to include multimedia effects and increased interactivity within Web pages.

JPEG
Joint Photographic Experts Group. JPEG is another file format that can be viewed on the Web. The image is compressed, thus reducing the file size, for faster loading.

Kbps
Kilobits per second. This represents your modem speed – high is better.

Leased line
A permanent phone line between two points on the Internet.

Links
A link, or hyperlink, acts as a bridge between separate Web pages. By clicking on a link you are taken to another Web page.

explained

into plain English

INFO

Although we have done our best to explain the most common terms, you are bound to come across ones not covered here. If this ever happens, a good place to go for help is the New Media in Business Web site at http://www.hyperglossary.co.uk.

Markup
Markup refers to the sequence of characters or other symbols that you insert at certain places in a text or word processing file to indicate how the file should look when it is printed or displayed or to describe the document's logical structure. The markup indicators are often called 'tags.'

MMX
Stands for Multimedia extensions. This is an improvement to Intel's Pentium processor which processes graphics, sound and other data at high speeds.

Modem
Modulator/demodulator. A piece of equipment that connects computers to each other for sending communications via telephone lines. The modem converts the digital data of computers into analogue signals to send over the telephone lines, then changes it back into digital signals to be read by the computer on the other end. Modems are used for sending and receiving electronic mail, and also for surfing the Net.

MUD
Multi-User Dimension. An adventure game where many people around the world can play simultaneously and communicate within the confines of the game.

Newsgroups
Discussion groups which are held over the Net. Also known as Usenet.

Newsreader
The software that enables you to read messages (or 'postings') that people have sent to newsgroups. Built into the popular Web browsers.

News (NNTP) Server
The hardware that holds all the newsgroups you can access, usually based at your Internet service provider. If you've used DejaNews or HotBot to find the name of a newsgroup but can't find it when you look through your news server's list of available groups, you may be able to find it on a 'public access' server.

Offline
When your computer is not connected to the Internet.

Offline Browser
Software which downloads the content of Web pages onto your hard drive, so whole sites can then be viewed 'offline' at your convenience.

Online Service Provider
A company which offers Internet access combined with its own interface and 'members-only' services, such as live chat rooms, message boards, online shopping malls and news feeds.

Packet
A packet refers to the unit of data routed between an origin and a destination on the Internet. When any file (email message, HTML file, GIF file, URL request, and so forth) is sent from one place to another on the Internet, the Transport Control Protocol (TCP) layer of TCP/IP divides the file into sections that are an efficient size for routing. Each of these packets include the Internet address of the destination. The individual packets for a given file may travel different routes through the Internet; when they have all arrived, they are reassembled into the original file (by the TCP layer at the receiving end).

Ping
Ping is an Internet program that lets you verify that a particular Internet address exists and can accept requests.

Plug-and-play
Plug-and-play refers to when you can plug a device into a computer and have the computer recognise that the device is there.

Plug-ins
In the context of the Web, these are 'extensions' to your browser which enhance its functionality. Plug-ins enable you to play sound files or animations, for example.

PoPs
Points of Presence. Refers to the modems which you dial into to connect to the Internet.

POP3
Post Office Protocol 3. The most recent version of a standard protocol for receiving email. POP3 is a client-server protocol in which email is received and held for you by your Internet server. Periodically, you check your mailbox on the server and download any new mail.

PPP
Point to Point Protocol. This refers to the protocol that lets your computer connect to the Internet via a modem.

Router
A special-purpose computer (or software package) that handles the connection between two or more networks. Routers spend all their time looking at the destination addresses of the packets passing through them and deciding which route to send them on.

Search Engine
Web sites which contain powerful search facilities which let users find other pages on a specific subject.

Shareware
Shareware refers to software that is distributed free on a trial basis with the understanding that the user will probably pay for it later. Some software developers offer a shareware version of their program with a built-in expiration date (after 30 days, the user can no longer get access to the program). Other shareware (sometimes called liteware) is offered with certain capabilities disabled.

SMTP
Simple Mail Transfer Protocol. A common protocol for sending email across the Internet, gradually being replaced by POP3.

Streaming Media
Streaming media is streaming video with sound. The best thing about streaming media is that a Web user does not have to wait to download a large file before seeing the video or hearing the sound. Instead, the media is sent in a continuous stream and is played as it arrives. The user needs a player, which is a special program that uncompresses and sends video data to the display and audio data to speakers. One of the most popular is RealNetworks' RealPlayer.

TCP/IP
Transmission Control Protocol/Internet Protocol. The common language that all computers connected to the Internet use in order to communicate with each other. No TCP/IP, no Internet!

Telnet
The Telnet protocol allows you to use the Internet to type to another user's computer much as if you were sitting in front of it. This is known as 'terminal emulation.' Examples of Telnet services include searchable databases, bulletin boards and real-time chatlines.

URL
This stands for Uniform Resource Locator. This refers to a sequence of characters that specify the address of a resource on the Web, e.g a Web page (in the form of http://) or an FTP site (in the form of ftp://).

USB
USB (Universal Serial Bus) is a plug-and-play interface between a computer and add-on devices (such as audio players, joysticks, keyboards, telephones, scanners, and printers). With USB, a new device can be added to your computer without having to add an adapter card or even having to turn the computer off.

Usenet
Usenet is basically a collection of notes on various subjects that have been posted to servers on a worldwide network. Each subject collection of posted notes is known as a newsgroup.

Virtual Hosting
On the Internet, virtual hosting is the provision of Web server and other services so that a company or individual don't have to buy and maintain their own Web server host with a line to the Internet.

A virtual hosting provider is sometimes also called a Web or Internet 'space provider.'

VRML
Virtual Reality Modelling Language. A programming language which is used to create the illusion of 3D objects for on-screen virtual reality environments. The computer shows an apparently three-dimensional object from a certain position, and then creates the illusion of movement by gradually changing the viewpoint.

Web Browser
A program installed in your computer's memory that reads, or 'browses' Web pages. A full Internet connection is needed for them to browse the Web. Internet Explorer and Netscape Navigator are the most popular Web browsers, now available in 'suites' along with many other essential Internet programs.

Webcasting
Webcasting (push technology) refers to the prearranged updating of news, weather, or any other selected information on a computer user's desktop interface. This is achieved through periodic, and generally unobtrusive, transmission over the World Wide Web (which includes the use of the Web protocol on intranets).

Web Ring
A Web ring is a way of interlinking related Web sites so that you can visit each site one after the other, eventually (if you keep going) returning to the first Web site.

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Customers can connect at speeds up to 33.6kbps, as well as via K56Flex and ISDN. There are no extra charges for K56Flex or ISDN connections. By using a BT WirePlay connection, DNA offers customers a connection at the same rate across the UK (currently 5.1 p/min 8am to 6pm Mon-Fri, 2.1 p/min evenings and weekends). WirePlay is specifically designed to handle data communications, and only routes calls through digital exchanges to minimise signal loss and disconnections.

Any new subscriber who pays for 12 months access in advance (£90 + VAT) gets a free 33.6kbps internal fax modem – subscribe to *Practical Internet* though, and you'll get the modem bumped up to a 56kbps model for no additional cost.

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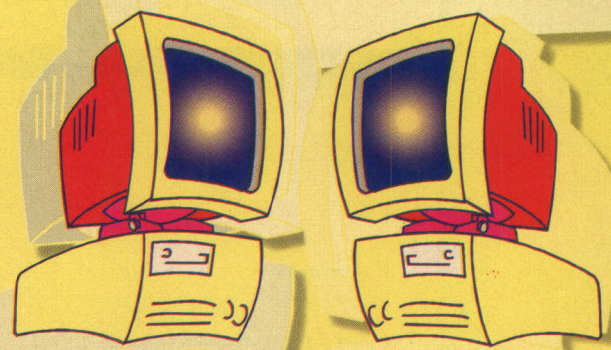

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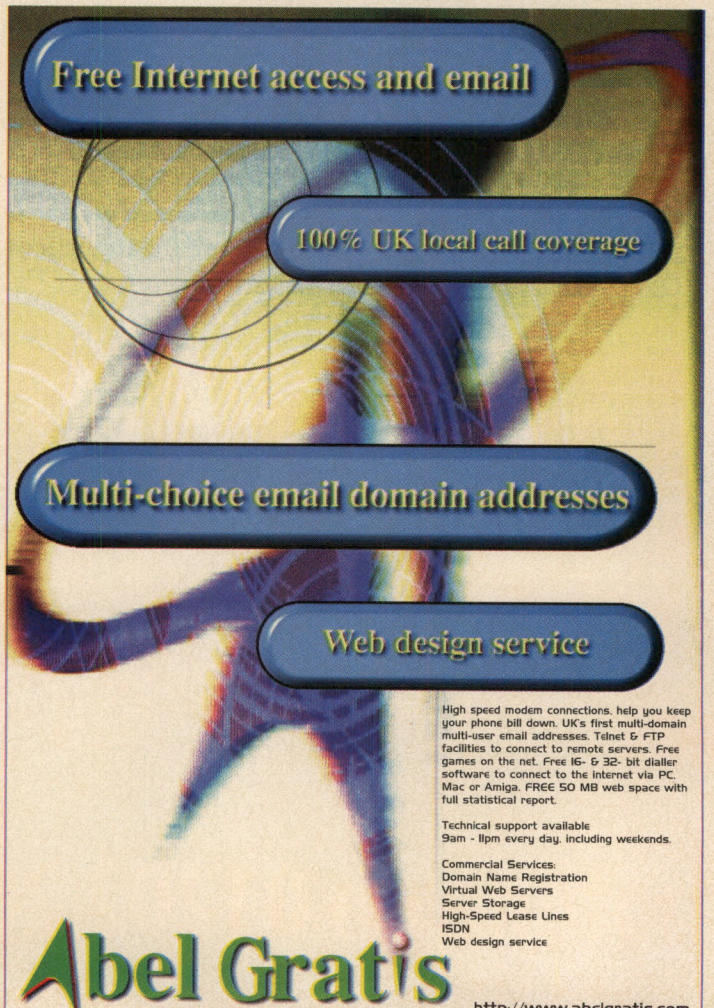

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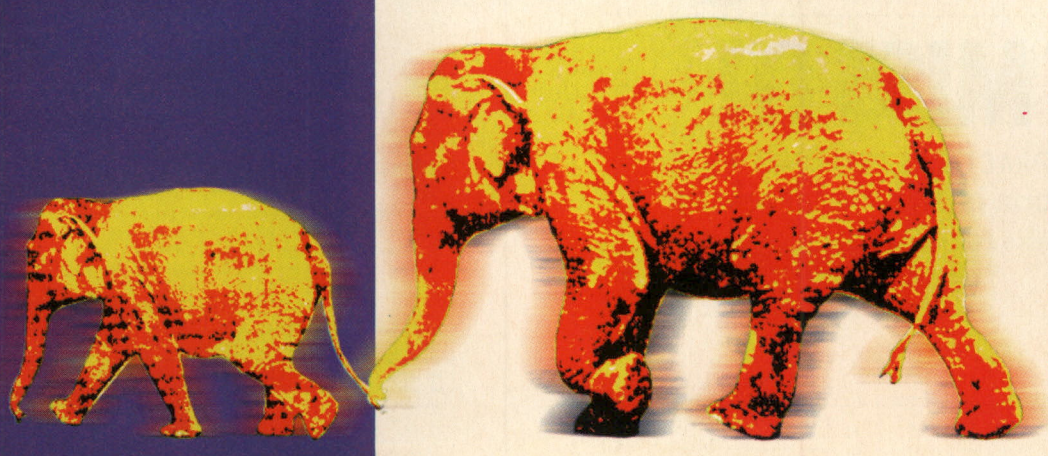

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BACKCHAT

Got something to say about the magazine or the Net in general? Here's your chance... Email us at pi@paragon.co.uk, or send your letters the old-fashioned way to Practical Internet, Paragon Publishing, Paragon House, St Peter's Road, Bournemouth, Dorset, BH1 2JS

Intelligent censorship

William Gallagher should receive an award for PI 27's 'Censored.' When just about every journalist has become intoxicated by the cyberporn panic, Gallagher kept his nerve.

And more power to *Practical Internet*, for carrying the feature that that not only squashed Net stereotypes but also critically examined the so-called 'digital toolbox' approach to protecting children. His conclusion – that it is parents who should decide how to protect and educate their kids on the Internet use – was straightforward and sensible.

Alan Docherty

No privacy

We hear of a person's PC going in for repair and the next thing, that person is slated in the press for having pornographic material or some other non-politically correct files on their hard disk.

Now my argument is, what right does the repair company have to trawl through someone's hard disk looking at personal files? Of course, I do not condone the subject of pornography or any other illegal activities, but it begs the question that when one's PC goes in for repair, does the engineer go through all of the files to see what he can find, on even totally innocent computers?

The files are generally buried within the hard drive and would not need to be accessed in the normal tests to repair a PC. I have even read of people being paranoid as to what engineers might find on their computers when it goes in for repair.

Can every computer owner feel happy that their PC is totally free of illegal or illicit material? I think not.

Tony Warren

Missing Macs

Firstly let me say I have bought and read your magazine on many occasions and thoroughly enjoyed it, but (ah, I hear you say, there's always a but!) why, oh why, is there never any Macintosh software on your CD? I have to say that you are not alone in this. Virtually every Internet magazine I buy these days, if a CD is included on the cover – there is either very little or no Mac software at all.

I really don't want to get into the PC versus Mac argument – I think everything has probably been said on this subject, but I happen to think that the MacOS is so much more user-friendly than Windows (even though it was changed to look like a 'Mac' interface). Any system which makes you go to a button marked 'Start' to shut down has got to be joking!

At the end of the day, there must be a lot more Mac owners out there on the Net (and buying magazines like yours) to warrant at least give a passing nod in our direction when you're compiling CDs!

This apart, I cannot find fault with your magazine, as most of the articles, even though reference shots always seem to show Windows/Explorer screens, have some relevance to me and can be translated into a MacOS/Communicator environment.

Thanks for the opportunity to air my grievance!

Jeremy Lee

We took the decision to stop including Mac software on our CDs as the majority of our readers were using Windows machines – and then a load of you went out and bought iMacs. Typical. We'll certainly consider re-introducing a Mac archive each issue, if enough Mac users email pi@paragon.co.uk to request it.

COMMENT

NO MORE NET NANNY?

Although we'd probably all agree that there's some extremely dodgy material on the Net, what do you think the best way to deal with it would be? Should we rely on electronic censors, or is education and awareness the key?

LETTER OF THE MONTH

WINS A PACE WEBCAM

Although I am a novice as far as the Internet is concerned, I bought the last issue of *Practical Internet*. I have started using AOL's 4.01 software and for my part, can tell you that I am very pleased with it. I couldn't believe how easy it was to install and get online, all of which took me no more than five minutes. I connect using a 56kbps V.90 modem at about 32kbps and have yet to experience any problems in this respect.

I have initially been put off using someone like Freeserve because all you ever seem to read about in all the PC mags is umpteen problems related to the extraordinary service, backed up by hundreds of articles and tutorials to help people overcome their frustrations with the UK's number one ISP – number one for what? I ask myself. Being the biggest ISP in the UK doesn't mean you're the best, does it? From what I have read, many people have experienced problems with the software, connections, using Outlook Express in conjunction with it, and then there's that 50p a minute technical support, and all this makes you number one?

Virgin Net seems a more attractive proposition even though technical phone support will cost a meagre £5.99 a month (forget the other side of the Virgin Coin which is £1.00 a minute phone support).

For my part, however, I am quite prepared to go 'proper' with AOL from the end of the month. It's an absolute delight to use. Email and IE 4.01 are a doddle – you just get online and use it. Yes, I will have to pay £16.95 a month or a one-off yearly payment of £179.40 but I really don't mind as I am getting quality and good service. These are the kinds of things which make you number one. I would urge anyone to use AOL. In my opinion they are indeed a 'Class Act.' In business you don't get nothin' for free, and those of us who believe in this are simply living in cloud cuckoo land. I sincerely believe that some free ISPs will eventually start to charge their members. They cannot solely rely on advertising revenue, and then there will be those who will not be able to strike up large and lucrative e-commerce deals: they will either go under first, or will have to start charging, and they may still go under if they cannot attract enough subscriptions.

Trevor Marshall

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CAUGHT SHORT

IE emancipation

My Web site is called Eastbourne Photographic Index (http://www.monocle.org). It contains an ever-increasing number of panoramic images of the town as well as standard JPEGs. The panoramas use Surround Video ActiveX for IE users and Live Picture for Netscape users. It's getting bigger all the time and I'd be pleased if you could give the URL a mention in the next issue of PI.

Stephen Cousins

COMPETITION WINNERS

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Poor Richard's Web site

Gary Beaton, Matthew Bones, Nick Handley, Christopher Thomas Hurst, Alan Lu, Mrs G McGrath, Trevor Mitchell, Darryl Parkyn, Maureen Richarson, Andrew Smith

FAQs

This month, we put **FIONA COUGHLAN**, UK MD of Macromedia, in the FAQ chair

INFO

Fiona Coughlan joined Macromedia in September 1998 as Managing Director of UK and Benelux. She is responsible for maintaining Macromedia's position as one of the world's leading developers of Web solutions. Fiona is not a new face to Macromedia – she had previously spent three years with the company (1994-1997).

Name: Fiona Coughlan

Age: 31

Occupation: UK MD of Macromedia

HIGH FIVE

FIONA'S FAVOURITE WEB SITES

1. **Disney** http://www.disney.com
2. **Eye4U** http://www.eye4u.com
3. **New Beetle** http://newbeetle.co.uk
4. **Shockwave** http://www.shockwave.com
5. **Varazdin 2000** http://www.2000.varazdin.com

1. How long have you been using the Net?
Years on email, but on the Web since 1995 when Macromedia launched Shockwave.

2. How many hours do you spend on it each day?
All day, every day, if you include emails, but two-three hours on the Web accessing macromedia.com for business and shockrave.com for my daily fix of *South Park*!

3. What do you like most about the Web?
The ease and immediate access to information.

4. What do you like least about it?
Un-navigable sites and lack of speed, but if people were to use Dreamweaver and Flash...

5. Which Web browser do you use and why?
Whichever my mouse lands on.

6. Do you have your own Web site, and if so, what's on it?
Yes – it's an internal one, capturing everyone's embarrassing moments!

7. What's the latest entry to your Web browser bookmarks?
http://www.2000.varazdin.com. Happens to be the latest of literally hundreds of great URLs I get sent every week which use our products.

8. If you had to put up a Web site about anything other than yourself or company what would it be about?
The benefits of not taking yourself too seriously!

9. Have you ever purchased anything over the Net? If so, what was it and how much did it cost?
Various birthday presents for family and friends – books and CDs – the usual stuff! I'm sure all readers of *Practical Internet* know that if you surf for just 10 minutes, there's a bargain to be found.

10. Do you ever chat online?
Unfortunately I don't usually have enough time to get involved in chat rooms, but I do follow the various Macromedia product user groups.

11. Would you ever have a date with anyone you met on the Net?
It would all depend on how interesting they were and where they were planning to take me!

12. Have you ever been harassed by anyone on the Net? If yes, in what way?
No, thankfully not.

13. Have you ever visited or paid to access a porn site on the Net?
No – it's not my scene.

14. Have you ever had cybersex, or do you know anyone who has?
It depends what you class as cybersex – all of us enjoy a little flirt but, as you can imagine, in my job I've seen a lot of Flashes!

15. What's the best thing you have done for the Web?
I wish I could take all the credit for it, but I can't – it would be launching Dreamweaver in the UK.

16. Should the Net be censored?
Too big a subject to answer objectively. The Web is a prolific means of communication and it would be irresponsible not to investigate censorship on certain subjects such as pornography and terrorism.

17. Some people think the Net makes us more isolated and anti-social. What do you think?
Again, it's another means of talking to each other and when used correctly, it can open a much wider world to all of us.

For the last couple of years everyone has been talking about acting globally and the Web has made this happen.

18. Name one positive thing you hope will happen to the Net over the next five years.
Apart from broad bandwidth, it would have to be improved design that makes the Web a more compelling and interactive experience for everyone.

19. Name one thing you hope won't happen over the next five years.
That the Web won't make couch potatoes of us all, but inspire us to use our free time more effectively.

20. How has the Net changed your life?
Without the Web, I wouldn't be where I am today! It enables me to access information more quickly, get things done more efficiently and have the time to check out new opportunities.

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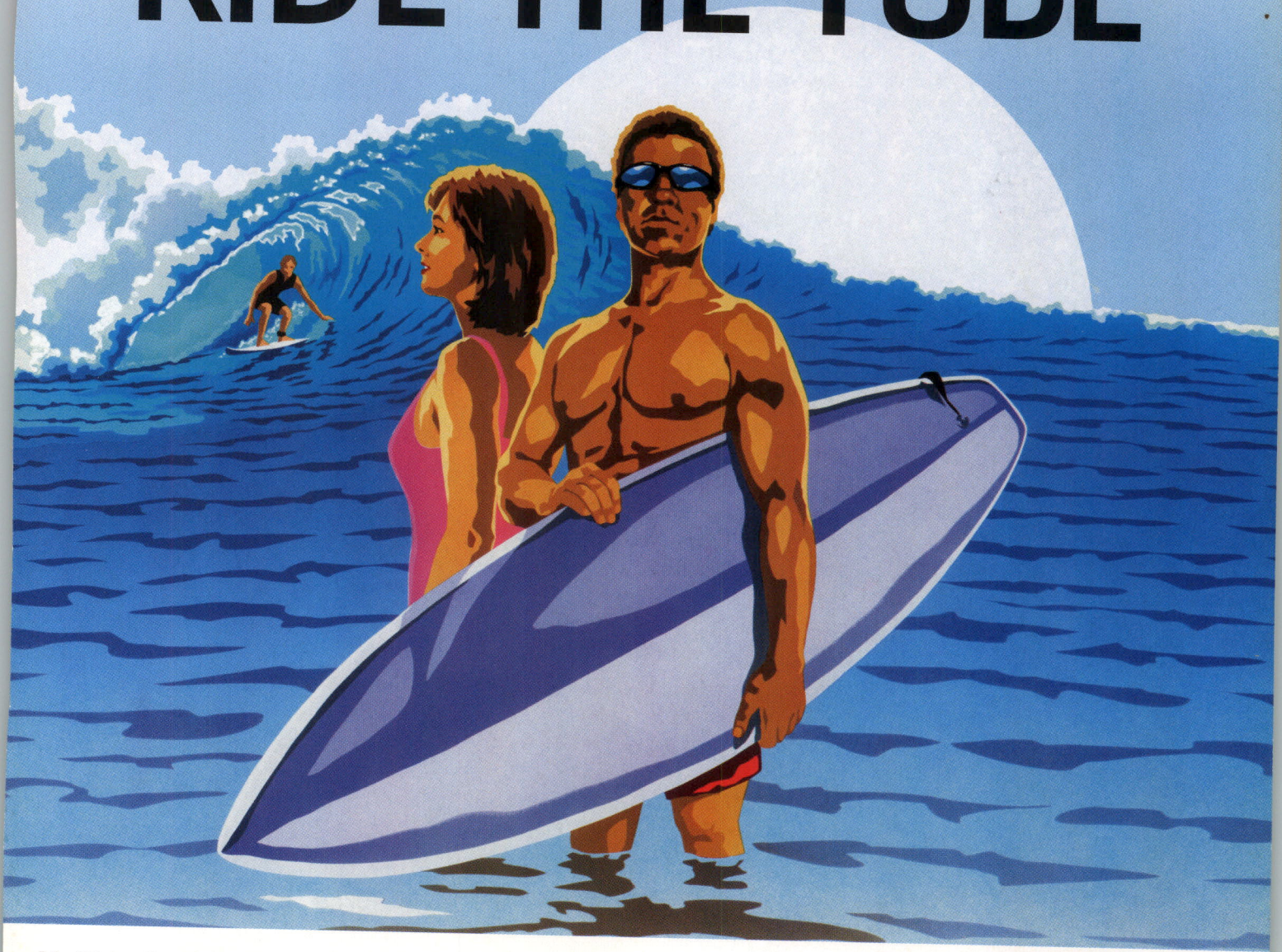

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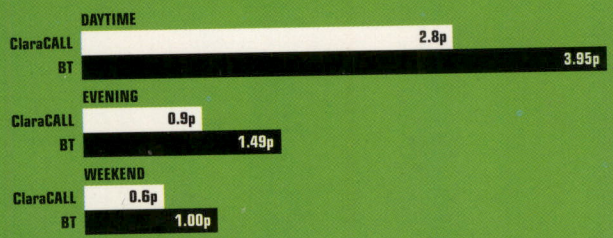

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